

## Index

## A

Above, 46, 47, 225  
 Access control list, 193, **470**  
 Active grab, **248, 470**  
 AllHints, 355  
 AllocAll, 86, 87, 95, 377  
 Allocation:  
   read-only colormap cells, 89  
   colormap, 90  
   read-only colormap cells, 90, 91  
   read/write colormap cells, 92  
   read/write colormap planes, 93  
 AllocNamedColor, 243  
 AllocNone, 86  
 AllowEvents, 258  
 AllowExposures, 190, 192  
 AllPlanes, **10**, 130  
 AllTemporary, 190  
 AlreadyGrabbed, 250, 254  
 Always, 23, 37, 53, 59, 215  
 Ancestors, **470**  
 AnyButton, 251, 253  
 AnyKey, 255, 256  
 AnyModifier, 251, 253, 255, 256  
 AnyPropertyType, 66, 68  
 ArcChord, 133, 145, 161  
 ArcPieSlice, 129, 133, 145, 161  
 Arcs:  
   drawing, 156  
   filling, 160  
 Areas:  
   clearing, 147  
   copying, 148  
 AsyncBoth, 256, 257  
 AsyncKeyboard, 256, 257, 258  
 AsyncPointer, 256, 257, 258  
 Atom, 62  
   predefined, 62  
 Atom, 63  
   interning, 64  
   getting name, 65  
   interning, 65  
 Atom, 326  
   predefined, 343  
 Atom, 347, 450, 452, **470**  
 Authentication, 193  
 AutoRepeatModeDefault, 262  
 AutoRepeatModeOff, 262, 263

AutoRepeatModeOn, 262, 263

## B

B16, 449  
 B32, 449  
 Background, **470**  
 Backing store, **470**  
 BadAccess, 54, 95, 96, 97, 98, 194, 195, 196, **243**,  
 253, 256  
 BadAlloc, 41, 42, 65, 69, 73, 74, 75, 76, 86, 87,  
 134, 135, 137, 138, 139, 140, 142, 143, 144, 145,  
 146, 165, **243**, 270, 272, 351, 353, 354, 357, 360,  
 361, 363, 364, 365, 366, 367, 370, 371, 377, 408,  
 409, 416, 418, 460, 461, 462, 463  
 BadAtom, 65, 66, 68, 69, 70, 71, 72, **243**, 245,  
 282, 283, 316, 318, 326, 351, 352, 361, 362, 377,  
 462, 463  
 BadColor, 41, 54, 56, 87, 88, 90, 91, 92, 93, 94, 95,  
 96, 97, 98, 99, 100, 187, **243**, 245, 316, 318, 326  
 BadCursor, 41, 54, 56, 77, 78, **243**, 245, 250, 251,  
 253, 318, 326  
 BadDrawable, 59, 60, 73, 77, 134, 141, 142, 149,  
 150, 152, 154, 155, 157, 159, 160, 161, 175, 176,  
 178, 180, 181, 183, **243**, 245, 416, 417, 418, 463  
 BadFont, 75, 134, 135, 143, 166, 172, 174, 175,  
**243**, 245, 296  
 BadGC, 26, 134, 135, 136, 137, 138, 139, 140,  
 142, 143, 144, 145, 146, 149, 150, 152, 154, 155,  
 157, 159, 160, 161, 172, 175, 176, 178, 180, 183,  
**243**, 245, 416, 418  
 BadIDChoice, **243**  
 BadImplementation, 243, **245**  
 BadLength, 243, **245**, 272, 449  
 BadMatch, 33, 35, 36, 38, 39, 40, 41, 42, 46, 47,  
 48, 52, 54, 55, 56, 69, 70, 76, 86, 132, 133, 134,  
 135, 141, 142, 143, 144, 145, 148, 149, 150, 152,  
 154, 155, 157, 159, 160, 161, 175, 176, 178, 180,  
 181, 182, 183, 185, 186, 243, **245**, 260, 262, 263,  
 346, 410, 417, 418  
 BadName, 98, 165, 243, **245**  
 BadPixmap, 41, 54, 55, 74, 76, 134, 135, 142, 143,  
 144, 243, **245**, 316, 318, 326  
 BadRequest, 243, **245**  
 BadValue, 26, 39, 41, 42, 46, 48, 49, 50, 51, 54,  
 65, 68, 69, 73, 74, 75, 86, 93, 94, 95, 96, 97, 98,  
 99, 100, 133, 134, 135, 137, 138, 139, 140, 141,  
 145, 146, 148, 150, 152, 154, 160, 180, 181, 183,  
 185, 188, 190, 191, 192, 194, 195, 196, 240, 243,

**245**, 250, 251, 253, 254, 256, 258, 260, 262, 263, 264, 265, 266, 269, 270, 272, 346, 351, 418  
 BadWindow, 41, 42, 44, 45, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 61, 62, 68, 69, 70, 71, 72, 86, 148, 185, 186, 188, 232, 240, 242, 243, **245**, 250, 253, 254, 256, 259, 260, 316, 318, 321, 346, 351, 352, 353, 354, 355, 357, 360, 361, 362, 363, 364, 365, 366, 367, 368, 370, 371, 377, 460, 461, 462, 463  
 Base font name, **470**  
 Below, 46, 47  
 Bit:  
   gravity, **470**  
   plane, **470**  
 Bitmap, 2, **471**  
 BitmapBitOrder, **19**  
 BitmapFileInvalid, 415  
 BitmapNoMemory, 415, 417  
 BitmapOpenFailed, 415, 417  
 BitmapPad, **19**  
 BitmapSuccess, 415, 417  
 BitmapUnit, **19**  
 BlackPixel, 10, **11**  
 BlackPixelOfScreen, **21**  
 Bool, **4**, 199, 236, 237, 315, 439  
 Border, **471**  
 BottomIf, 46, 47, 48  
 Button:  
   grabbing, 251  
   ungrabbing, 253  
   grabbing, **471**  
 Button1, 206  
 Button1Mask, 206, 208  
 Button1Motion, 38  
 Button1MotionMask, 200, 203, 206, 249  
 Button2, 206  
 Button2Mask, 206, 208  
 Button2Motion, 38  
 Button2MotionMask, 200, 206, 249  
 Button3, 206  
 Button3Mask, 206, 208  
 Button3Motion, 38  
 Button3MotionMask, 200, 206, 249  
 Button4, 206  
 Button4Mask, 206, 208  
 Button4Motion, 38  
 Button4MotionMask, 200, 206, 249  
 Button5, 206  
 Button5Mask, 206, 208  
 Button5Motion, 38  
 Button5MotionMask, 200, 203, 206, 249  
 ButtonMotion, 38  
 ButtonMotionMask, 200, 201, 203, 249

ButtonPress, 38, 197, 200, **203**, 210, 232, 252, 257  
 ButtonPressMask, 53, 200, 203, 232, 249  
 ButtonRelease, 38, 197, **203**, 210, 257  
 ButtonReleaseMask, 200, 203, 249  
 Byte:  
   order, **471**

## C

CallbackPrototype, **328**  
 calloc, 456  
 CapButt, 129, 131, 138  
 CapNotLast, 131, 138  
 CapProjecting, 131, 138  
 CapRound, 131, 138  
 CARD16, 457  
 CARD32, 457  
 CCC, 85  
   default, 85  
   of colormap, 85  
   default, 100  
   of colormap, 100  
   default, 101  
   of colormap, 101  
   creation, 104  
   freeing, 105  
 CellsOfScreen, **21**  
 CenterGravity, 36, 59  
 Changing:  
   pointer grab, 251  
 char, 66, 68, 69, 457  
 Character, **471**  
 Character glyph, **471**  
 Character set, **471**  
 Charset, **471**  
 CharSetEncoding, 288, 470, 473  
 CharSetRegistry, 288, 470, 473  
 Children, **471**  
 Child window, 1  
 Child Window, 57  
 Chroma, 117  
   maximum, 117  
 Chroma, 118  
   maximum, 118  
 Chroma, 119  
   maximum, 119  
 CIE metric lightness, 113, 114  
   maximum, 114  
 CIE metric lightness, 115  
   minimum, 115  
 CIE metric lightness, 116  
   maximum, 116  
 CIE metric lightness, 117

- minimum, 117
- CirculateNotify, 51, 197, 201, 207, **217**, 223
- CirculateRequest, 51, 197, **224**, 232
- Class, **471**
- Clearing:
  - areas, 147
  - windows, 148
- Client, **472**
- ClientMessage, 63, 197, 200, **227**, 345
- Client White Point, 85
  - of Color Conversion Context, 103
- ClientWhitePointOfCCC, **102**
- ClipByChildren, 129, 133, 146, 147
- Clipping region, **472**
- Coded character, **472**
- Coded character set, **472**
- Codepoint, **472**
- Color, 80
  - naming, 87, 88
  - allocation, 89, 90, 91
  - naming, 91
  - allocation, 92, 93
  - deallocation, 94
  - storing, 95, 96
  - naming, 97
  - storing, 97
  - querying, 98, 99
  - conversion, 106
- Color Characterization Data, 125
- Color conversion, 106
- Color Conversion Context, 85
  - creation, 85
  - default, 85
  - of colormap, 85
  - creation, 100
  - default, 100
  - of colormap, 100
  - default, 101
  - of colormap, 101
  - creation, 104
  - freeing, 105
- Colormap, 2, 26, 27
  - CCC of, 100, 101
- Colormap, 326, 450, **472**
- Color map, 80, 90
- ColormapChangeMask, 200, 227
- ColormapInstalled, 227
- ColormapNotify, 53, 87, 187, 197, **226**, 227
- Colormaps:
  - standard, 375
- ColormapUninstalled, 227
- Complex, 159, 160
- ConfigureNotify, 46, 197, 201, 207, 217, **218**, 223
- ConfigureRequest, 3, 46, 48, 49, 50, 51, 52, 197, 224, **225**, 232
- ConfigureRequestEvent, 346
- ConfigureWindow, 225, 346
- Connection, **472**
- ConnectionNumber, **11**
- Containment, **472**
- Control, 272
- ControlMask, 206, 209, 249, 253
- ConvertSelection, 230
- Convex, 159
- Coordinate system, **472**
- CoordModeOrigin, 152, 153, 154, 159
- CoordModePrevious, 152, 153, 154, 159
- CopyArea, 150
- CopyFromParent, 34, 36, 39, 53, 55
- Copying:
  - areas, 148
  - planes, 149
- CreateNotify, 40, 41, 197, 201, 217, **219**
- CurrentTime, 71, 72, 200, 230, 241, **248**, 249, 250, 251, 253, 254, 255, 256, 259, 260, 482
- Cursor, 2, 26, 27
  - Initial State, 41
  - limitations, 77
- Cursor, 326, 450, **472**
- CursorShape, 140, 141
- Cut Buffers, 408
- CWBackingPixel, 33
- CWBackingPlanes, 33
- CWBackingStore, 33
- CWBackPixel, 33
- CWBackPixmap, 33
- CWBitGravity, 33
- CWBorderPixel, 33
- CWBorderPixmap, 33
- CWBorderWidth, 45
- CWColormap, 33
- CWCursor, 33
- CWDontPropagate, 33
- CWEventMask, 33
- CWHeight, 45
- CWOverrideRedirect, 33
- CWSaveUnder, 33
- CWSibling, 45
- CWStackMode, 45
- CWWidth, 45
- CWWinGravity, 33
- CWX, 45

CWY, 45

## D

Data, 452, 453, 456

Data16, 453

Data32, 453

Debugging:

error handlers, 242

synchronous mode, 242

error event, 243

error numbers, 243

error message strings, 245

DefaultBlanking, 190, 192

DefaultColormap, **11**, 80

DefaultColormapOfScreen, **22**

DefaultDepth, **12**

DefaultDepthOfScreen, **22**

DefaultExposures, 190, 192

DefaultGC, **12**

DefaultGCOfScreen, **22**

Default Protection, 193

DefaultRootWindow, **13**

DefaultScreen, 8, 9, **13**

DefaultScreenOfDisplay, **13**

DefaultVisual, **14**, 80

DefaultVisualOfScreen, **22**

## #

#define, 63, 343

## D

Depth, **473**

Destination, **129**

DestroyAll, 26, 27

DestroyCallback, **314**, **329**

DestroyNotify, 42, 197, 201, 217, **219**

Device, **473**

Device Color Characterization, 124

Device profile, 85, 125

DirectColor, 31, 32, 80, 86, 93, 94, 376, **473**, 482

DisableAccess, 196

Display, 9, 10

data structure, 10

Display, 26, 272, 445, 446, 451, 453, **473**

structure, 473

Display, 480

structure, 480

DisplayCells, **14**

Display Functions, **129**

DisplayHeight, **20**

DisplayHeightMM, **20**

DisplayOfCCC, **101**

DisplayOfScreen, **23**

DisplayPlanes, **14**

DisplayString, **15**

DisplayWidth, **20**

DisplayWidthMM, **21**

DoBlue, 80, 88, 96, 97, 98, 99

DoesBackingStore, **23**

DoesSaveUnders, **23**

DoGreen, 80, 88, 96, 97, 98, 99

DontAllowExposures, 190, 192

DontPreferBlanking, 190, 192

DoRed, 80, 88, 96, 97, 98, 99

Drawable, 2, 450, 452, **473**

Drawing:

points, 151

lines, 152

polygons, 152

rectangles, 154

arcs, 156

text items, 173

strings, 175

image text, 176

## E

EastGravity, 36, 59

EnableAccess, 196

Encoding, **473**

EnterNotify, 197, **207**, 208, 209, 210, 211, 214,

223, 250, 251

EnterWindowMask, 200, 207, 249

Environment:

DISPLAY, 8

Error:

handling, 3

handlers, 242

codes, 243

Escapement, **473**

/

/etc/X?.hosts, 193

## E

EvenOddRule, 129, 133, 140, 404

Event, 2, 197

categories, 197

types, 197

propagation, 231

Event, **473**

Exposure, **474**  
 mask, **474**  
 propagation, **474**  
 source, **474**  
 synchronization, **474**  
 Event mask, **199**  
 EventMaskOfScreen, **23**  
 Events:  
   ButtonPress, 203  
   ButtonRelease, 203  
   KeyPress, 203  
   KeyRelease, 203  
   MotionNotify, 203  
   EnterNotify, 207  
   LeaveNotify, 207  
   FocusIn, 210  
   FocusOut, 210  
   KeymapNotify, 214  
   Expose, 215  
   GraphicsExpose, 216  
   NoExpose, 216  
   CirculateNotify, 217  
   ConfigureNotify, 218  
   CreateNotify, 219  
   DestroyNotify, 219  
   GravityNotify, 220  
   MapNotify, 220  
   MappingNotify, 221  
   ReparentNotify, 222  
   UnmapNotify, 222  
   VisibilityNotify, 223  
   CirculateRequest, 224  
   ConfigureRequest, 225  
   MapRequest, 225  
   ColormapNotify, 226  
   ResizeRequest, 226  
   ClientMessage, 227  
   PropertyNotify, 228  
   SelectionClear, 229  
   SelectionRequest, 229  
   SelectionNotify, 230  
 Expose, 2, 3, 33, 36, 37, 42, 43, 44, 45, 48, 49, 50, 51, 147, 148, 185, 191, 197, 207, 211, **215**, 223  
 ExposureMask, 200, 215  
 Extension, **474**

**F**

False, **4**, 23, 29, 34, 38, 43, 46, 48, 49, 50, 51, 52, 59, 61, 62, 64, 97, 106, 148, 166, 200, 203, 206, 208, 225, 226, 227, 232, 234, 235, 237, 238, 239, 240, 242, 250, 254, 274, 281, 291, 292, 311, 312, 315, 338, 356, 388, 389, 390, 393, 434, 440, 442, 454  
 FamilyChaos, 193  
 FamilyDECnet, 193  
 FamilyInternet, 193  
 FamilyInternet6, 193  
 FamilyServerInterpreted, 193  
 Files:  
   <X11/X.h>, 2  
   <X11/Xcms.h>, 3  
   <X11/X.h>, 3  
   <X11/Xlib.h>, 3  
   <X11/Xresource.h>, 3  
   <X11/Xutil.h>, 3  
   <X11/cursorfont.h>, 4  
   <X11/keysymdef.h>, 4  
   <X11/keysym.h>, 4  
   <X11/X10.h>, 4  
   <X11/Xatom.h>, 4  
   <X11/Xlib.h>, 4  
   <X11/Xlibint.h>, 4  
   <X11/Xproto.h>, 4  
   <X11/Xprotostr.h>, 4  
   <X11/Xlib.h>, 9  
   <X11/Xatom.h>, 63  
   <X11/Xcms.h>, 79  
   <X11/Xlib.h>, 79  
   <X11/X.h>, 129  
   <X11/Xatom.h>, 166  
   /etc/X?.hosts, 193  
   <X11/X.h>, 197  
   <X11/Xlib.h>, 198  
   <X11/X.h>, 200  
   <X11/Xproto.h>, 216, 243  
   <X11/keysymdef.h>, 267  
   <X11/keysym.h>, 267  
   <X11/Xlib.h>, 341  
   <X11/Xatom.h>, 343  
   <X11/Xutil.h>, 355, 357, 362, 367  
   <X11/Xatom.h>, 375  
   <X11/Xresource.h>, 379  
   <X11/keysymdef.h>, 398  
   <X11/Xutil.h>, 402, 403, 410  
   <X11/Xlib.h>, 411  
   <X11/Xutil.h>, 413, 418  
   <X11/Xlibint.h>, 434  
   <X11/Xlib.h>, 435, 445, 446  
   <X11/Xlibint.h>, 448, 449  
   <X11/Xproto.h>, 449, 450  
   <X11/Xlibint.h>, 451  
   <X11/Xproto.h>, 451  
   <stdio.h>, 457  
   <X11/Xutil.h>, 460  
   \$HOME/.Xdefaults, 465

- <X11/X10.h>, 466
  - Filling:
    - rectangles, 158
    - polygon, 159
    - arcs, 160
  - FillOpaqueStippled, 132, 140, 150
  - FillPolygon, 158
  - FillSolid, 129, 132, 140, 178
  - FillStippled, 132, 140
  - FillTiled, 132, 140
  - FlushGC, **447**, 448
  - FocusChangeMask, 200, 210
  - FocusIn, 197, **210**, 211, 212, 213, 214, 254, 255, 260
  - FocusOut, 197, 207, **210**, 211, 212, 213, 214, 223, 254, 255, 260
  - Font, 2
  - font, 6
  - Font, 26, 27, 161, 450, **474**
  - Font glyph, **474**
  - FontLeftToRight, 163, 169, 170, 171
  - FontRightToLeft, 163, 169, 170, 171
  - Fonts:
    - freeing font information, 164
    - getting information, 164
    - unloading, 164
  - Fonts, 468
  - Forget, 37
  - ForgetGravity, 34, 36, 37, 59
  - fork, 15
  - free, 456
  - Freeing:
    - resources, 33, 54, 55
    - colors, 94
  - Frozen events, **474**
  - Function set, 124
    - LINEAR\_RGB, 124
- ## G
- Gamut compression, 85
    - client data, 103
    - procedure, 103
    - setting in Color Conversion Context, 103
  - Gamut handling, 85
  - Gamut querying, 111
  - GC, 445, **474**
  - GCArcMode, 127, 135
  - GCBgground, 127, 135
  - GCCapStyle, 127, 135
  - GCClipMask, 127, 135
  - GCClipXOrigin, 127, 135
  - GCClipYOrigin, 127
  - GCCLipYOrigin, 135
  - GCDashList, 127, 135
  - GCDashOffset, 127, 135
  - GCFillRule, 127, 135
  - GCFillStyle, 127, 135
  - GCFont, 127, 135
  - GCForeground, 127, 135
  - GCFunction, 127, 135
  - GCGraphicsExposures, 127, 135
  - GCGJoinStyle, 127, 135
  - GCLineStyle, 127, 135
  - GCLineWidth, 127, 135
  - GContext, 2, 26, 27, 136, 164, 165, 171, 243, 450
  - GCPlaneMask, 127, 135
  - GCStipple, 127, 135
  - GCSubwindowMode, 127, 135
  - GCTile, 127, 135
  - GCTileStipXOrigin, 127, 135
  - GCTileStipYOrigin, 127, 135
  - GeometryCallback, **329**
  - GetEmptyReq, 451, 452
  - GetKeyboardControl, 451, 453
  - GetReq, 451, 452, 456
  - GetReqExtra, 451, 452
  - GetResReq, 451, 452
  - GetWindowAttributes, 451, 453, 454
  - Glyph, **474**
  - Glyph image, **475**
  - Grab, **475**
  - Grabbing:
    - server, 189
    - pointer, 249
    - buttons, 251
    - keyboard, 253
    - keys, 255
  - GrabFrozen, 250, 254
  - GrabInvalidTime, 250, 254
  - GrabModeAsync, 203, 249, 250, 251, 253, 254, 255
  - GrabModeSync, 249, 250, 251, 253, 254, 255
  - GrabNotViewable, 250, 254
  - GrabSuccess, 249
  - Graphics context, 127
    - path, 131
    - initializing, 134
  - Graphics context, **475**
  - GraphicsExpose, 133, 146, 149, 197, 198, 200, **216**, 217
  - Gravity, **475**
  - GravityNotify, 37, 46, 197, 201, 207, 217, **220**, 223
  - GrayScale, 31, 32, 76, 80, 86, 93, 375, 376, 463, **475**, 481

GXand, 129  
 GXandInverted, 129  
 GXandReverse, 129  
 GXclear, 129  
 GXcopy, 129, 148, 149, 178  
 GXcopyInverted, 129  
 GXequiv, 129  
 GXinvert, 129  
 GXnand, 129  
 GXnoop, 129  
 GXnor, 129  
 GXor, 129  
 GXorInverted, 129  
 GXorReverse, 129  
 GXset, 129  
 GXxor, 129

## H

Hash Lookup, 467  
 Headers:  
 <X11/X.h>, 2  
 <X11/Xcms.h>, 3  
 <X11/X.h>, 3  
 <X11/Xlib.h>, 3  
 <X11/Xresource.h>, 3  
 <X11/Xutil.h>, 3  
 <X11/cursorfont.h>, 4  
 <X11/keysymdef.h>, 4  
 <X11/keysym.h>, 4  
 <X11/X10.h>, 4  
 <X11/Xatom.h>, 4  
 <X11/Xlib.h>, 4  
 <X11/Xlibint.h>, 4  
 <X11/Xproto.h>, 4  
 <X11/Xprotostr.h>, 4  
 <X11/Xlib.h>, 9  
 <X11/Xatom.h>, 63  
 <X11/Xcms.h>, 79  
 <X11/Xlib.h>, 79  
 <X11/X.h>, 129  
 <X11/Xatom.h>, 166  
 <X11/X.h>, 197  
 <X11/Xlib.h>, 198  
 <X11/X.h>, 200  
 <X11/Xproto.h>, 216, 243  
 <X11/keysymdef.h>, 267  
 <X11/keysym.h>, 267  
 <X11/Xlib.h>, 341  
 <X11/Xatom.h>, 343  
 <X11/Xutil.h>, 355, 357, 362, 367  
 <X11/Xatom.h>, 375  
 <X11/Xresource.h>, 379

<X11/keysymdef.h>, 398  
 <X11/Xutil.h>, 402, 403, 410  
 <X11/Xlib.h>, 411  
 <X11/Xutil.h>, 413, 418  
 <X11/Xlibint.h>, 434  
 <X11/Xlib.h>, 435, 445, 446  
 <X11/Xlibint.h>, 448, 449  
 <X11/Xproto.h>, 449, 450  
 <X11/Xlibint.h>, 451  
 <X11/Xproto.h>, 451  
 <stdio.h>, 457  
 <X11/Xutil.h>, 460  
 <X11/X10.h>, 466  
 HeightMMOfScreen, **24**  
 HeightOfScreen, **24**  
 HeightValue, 402

## \$

\$HOME/.Xdefaults, 465  
 \$HOME/.Xdefaults-name, 465

## H

Host Portable Character Encoding, **475**  
 Hotspot, **475**

## I

IconicState, 345, 356  
 IconMaskHint, 355  
 IconPixmapHint, 355  
 IconPositionHint, 355  
 IconWindowHint, 355  
 Identifier, **475**  
 ImageByteOrder, **19**  
 Image text:  
 drawing, 176  
 IMInstantiateCallback, **311**

## #

#include, 418

## I

IncludeInferiors, 133, 146  
 Inferiors, **475**  
 InitExtension, 246  
 Input:  
 focus, **475**  
 manager, **475**  
 Input Control, 197

InputFocus, 239, 240  
 InputHint, 355  
 InputOnly, 33, 34, 36, 38, 39, 40, 41, 46, 54, 55, 59, 60, 73, 141, 142, 148, 185, 215, 223, 243, 471, 473, 476, 477  
 InputOutput, 33, 34, 35, 36, 37, 38, 39, 40, 41, 43, 59, 133, 470, 471, 476, 477  
 int, 5, 326, 439, 457  
 Internationalization, **476**  
 IsCursorKey, **399**  
 IsFunctionKey, **399**  
 IsKeypadKey, **399**  
 IsMiscFunctionKey, **399**  
 IsModifierKey, **399**  
 ISO2022, **476**  
 IsPFKey, **399**  
 IsPrivateKeypadKey, **399**  
 isspace, 482  
 IsUnmapped, 59  
 IsUnviewable, 59  
 IsViewable, 59

## J

JoinBevel, 131, 138  
 JoinMiter, 129, 131, 138  
 JoinRound, 131, 138

## K

KBAutoRepeatMode, 261  
 KBBellDuration, 261  
 KBBellPercent, 261  
 KBBellPitch, 261  
 KBKey, 261  
 KBKeyClickPercent, 261  
 KBLed, 261  
 KBLedMode, 261  
 Key:  
   grabbing, 255  
   ungrabbing, 256  
   grabbing, **476**  
 Keyboard:  
   grabbing, 253  
   ungrabbing, 254  
   bell volume, 261  
   bit vector, 261  
   keyclick volume, 261  
   grabbing, **476**  
 KeymapNotify, 197, **214**  
 KeymapStateMask, 200, 214  
 KeyMapStateMask, 249  
 KeyPress, 38, 197, **203**, 214, 254, 255, 257, 262,

267, 339, 340, 396  
 KeyPressMask, 200, 203  
 KeyRelease, 38, 197, **203**, 214, 254, 257, 262, 339, 396  
 KeyReleaseMask, 200, 203  
 Keysym, **476**

## L

LastKnownRequestProcessed, **16**  
 Latin-1, **476**  
 Latin Portable Character Encoding, **476**  
 LeaveNotify, 197, **207**, 208, 209, 210, 211, 223, 250, 251  
 LeaveWindowMask, 200, 207, 249  
 LedModeOff, 262  
 LedModeOn, 262  
 LineDoubleDash, 131, 132, 138  
 LineOnOffDash, 131, 132, 138  
 Lines:  
   drawing, 152  
 LineSolid, 129, 131, 132, 138  
 Locale, **476**  
 Locale name, **477**  
 Localization, **477**  
 Lock, 268, 272, 400  
 LockDisplay, **451**  
 LockMask, 206, 209, 249, 253  
 long, 66, 68, 69, 322, 326, 439, 457  
 LookupColor, 243  
 LowerHighest, 51, 52  
 LSBFirst, 19

## M

malloc, 456  
 MapNotify, 43, 197, 201, 207, 217, **220**, 221, 223  
 Mapped window, **477**  
 MappingBusy, 265, 272  
 MappingFailed, 272  
 MappingKeyboard, 221, 222, 397  
 MappingModifier, 221, 397  
 MappingNotify, 197, 200, 217, **221**, 265, 270, 272, 397  
 MappingPointer, 221, 222  
 MappingSuccess, 265, 272  
 MapRequest, 43, 197, 224, **225**, 226, 232  
 MapWindow, 27, 184, 185  
 MaxCmapsOfScreen, **24**  
 mblen, 276  
 mbtowc, 276  
 Menus, 189  
 MinCmapsOfScreen, **25**

Mod1, 268, 272  
 Mod1Mask, 206, 209, 249, 253  
 Mod2, 272  
 Mod2Mask, 206, 209, 249, 253  
 Mod3, 272  
 Mod3Mask, 206, 209, 249, 253  
 Mod4, 272  
 Mod4Mask, 206, 209, 249, 253  
 Mod5, 268, 272  
 Mod5Mask, 206, 209, 249, 253  
 Modifier keys, **477**  
 Monochrome, **477**  
 MotionNotify, 197, 201, **203**, 204, 207, 241  
 Mouse:  
   programming, 261  
 MSBFirst, 19  
 Multibyte, **477**

## N

NextRequest, **16**, 243  
 NoEventMask, 38, 200  
 NoExpose, 146, 149, 197, 200, **216**  
 Nonconvex, 159, 160  
 None, **4**, 34, 35, 36, 39, 53, 54, 56, 59, 61, 62, 64,  
 67, 71, 72, 74, 75, 87, 129, 133, 144, 145, 148,  
 149, 173, 174, 203, 206, 208, 213, 218, 225, 227,  
 230, 249, 250, 251, 259, 260, 297, 338, 352, 377,  
 418, 459  
 NoOperation, 8, 25  
 NormalState, 356  
 NorthEastGravity, 36, 59, 403  
 NorthGravity, 36, 59  
 NorthWestGravity, 34, 36, 37, 59, 403  
 NoSymbol, 267, 269, 270, 396, 397, 398  
 NotifyAncestor, 209, 211, 212  
 NotifyDetailNone, 211, 213, 214  
 NotifyGrab, 209, 210, 211, 214  
 NotifyHint, 204, 206  
 NotifyInferior, 209, 211, 212  
 NotifyNonlinear, 209, 210, 211, 212, 213  
 NotifyNonlinearVirtual, 209, 210, 211, 212, 213  
 NotifyNormal, 206, 209, 211  
 NotifyPointer, 211, 212, 213, 214  
 NotifyPointerRoot, 211, 213, 214  
 NotifyUngrab, 209, 210, 211, 214  
 NotifyVirtual, 209, 211, 212  
 NotifyWhileGrabbed, 211  
 NotUseful, 23, 34, 37, 59

NULLQUARK, 393

## O

Obscure, **477**  
 Occlude, **477**  
 OpenFont, 243  
 Opposite, 46, 47, 48  
 Output Control, 197  
 OwnerGrabButtonMask, 200, 203

## P

PackData, 457  
 Padding, **478**  
 PAllHints, 358, 359  
 ParentRelative, 33, 35, 53, 54, 185  
 Parent Window, 1, 57  
 PAspect, 358  
 Passive grab, 248, **478**  
 PBaseSize, 358  
 Pixel value, 130, **478**  
 Pixmap, 2, 26, 27, 326, 450, 452, **478**  
 Pixmap, 468  
 PlaceOnBottom, 217, 218, 225  
 PlaceOnTop, 217, 225  
 Plane:  
   mask, 130  
   copying, 149  
 Plane, **478**  
   mask, **478**  
 PlanesOfScreen, **25**  
 PMaxSize, 358  
 PMinSize, 358  
 Pointer:  
   grabbing, 249  
   ungrabbing, 250  
   grabbing, 251  
 Pointer, **478**  
   grabbing, **478**  
 PointerMotion, 38  
 PointerMotionHintMask, 200, 204, 249  
 PointerMotionMask, 200, 201, 204, 249  
 PointerRoot, 27, 213, 214, 259, 260, 356  
 PointerWindow, 239, 240  
 Pointing device, **478**  
 Points:  
   drawing, 151  
 poll, 30  
 Polygons:  
   drawing, 152  
   filling, 159  
 PolyLine, 154, 155

- POSIX, **479**
  - POSIX Portable Filename Character Set, **479**
  - POSIX System Call:
    - fork, 15
  - PPosition, 358
  - PreeditCaretCallback, **335**
  - PreeditDoneCallback, **331**
  - PreeditDrawCallback, 331, **332**
  - PreeditStartCallback, **331**
  - PreeditStateNotifyCallback, **327**
  - PreferBlanking, 190, 192
  - PResizeInc, 358
  - Property:
    - getting, 66
    - listing, 68
    - appending, 69
    - changing, 69
    - format, 69
    - prepending, 69
    - replacing, 69
    - type, 69
    - deleting, 70
  - Property, **479**
  - PropertyChangeMask, 200, 228
  - PropertyDelete, 228, 229
  - Property list, **479**
  - PropertyNewValue, 228
  - PropertyNotify, 68, 69, 70, 197, 227, **228**
  - PropModeAppend, 69
  - PropModePrepend, 69
  - PropModeReplace, 69
  - Protocol:
    - DECnet, 9
    - TCP, 9
  - ProtocolRevision, **16**
  - ProtocolVersion, **16**
  - PseudoColor, 31, 32, 80, 86, 92, 93, 94, 376, 475, **479**, 481
  - PSize, 358
  - Psychometric Chroma, 113
    - maximum, 113
  - Psychometric Chroma, 114
    - maximum, 114
  - Psychometric Chroma, 115
    - maximum, 115
  - Psychometric Chroma, 116
    - maximum, 116
  - Psychometric Hue Angle, 113, 114, 115, 116, 117
  - PWinGravity, 358
- ## Q
- QLength, **17**
  - QueryFont, 243, 451, 453
  - QueryKeymap, 451, 453
  - QueuedAfterFlush, 233
  - QueuedAfterReading, 233
  - QueuedAlready, 233
- ## R
- RaiseLowest, 51, 52
  - Read-only colormap cells, 89
    - allocating, 89
  - read-only colormap cells, 90
  - Read-only colormap cells:
    - allocating, 90, 91
  - Read/write colormap cells, 89
    - allocating, 92
  - Read/write colormap planes:
    - allocating, 93
  - Rectangle:
    - filling, 158
  - Rectangle, **479**
  - RectangleIn, 408
  - RectangleOut, 408
  - RectanglePart, 408
  - Rectangles:
    - drawing, 154
  - Redirecting control, **479**
  - Region, 403
  - ReleaseByFreeingColormap, 374
  - ReparentNotify, 184, 197, 201, 217, **222**
  - ReplayKeyboard, 256, 257, 258
  - ReplayPointer, 256, 257, 258
  - Reply, **479**
  - Request, **479**
  - Requests, **197**
  - ResizeRedirect, 226
  - ResizeRedirectMask, 43, 46, 53, 200, 232
  - ResizeRequest, 43, 46, 197, 224, **226**, 232
  - Resource, **479**
  - Resource IDs, 2
    - Cursor, 2
    - Font, 2
    - GContext, 2
    - Pixmap, 2
    - Window, 2
  - Resource IDs, 26
    - freeing, 33, 54, 55
  - Resource IDs, 467

ResourceName, 392  
 RetainPermanent, 26, 27, 190  
 RetainTemporary, 26, 27, 190  
 RevertToNone, 259, 260  
 RevertToParent, 259, 260  
 RevertToPointerRoot, 259, 260  
 RGB values, **479**  
 Root, 127, **480**  
 RootWindow, **17**, 302  
 RootWindowOfScreen, **25**

## S

Save set, **480**  
 Save Unders, 38  
 Scanline, **480**  
   order, **480**  
 Screen, 1, 8, 9, 10, 21, 22, 23, 24, 25, 445, **480**  
   structure, 480  
 ScreenCount, **17**  
 ScreenFormat, 445  
 ScreenNumberOfCCC, **102**  
 ScreenOfDisplay, **13**  
 ScreenSaverActive, 191  
 ScreenSaverReset, 191, 192  
 Screen White Point, 111  
 ScreenWhitePointOfCCC, **102**  
 select, 30  
 Selection, 70  
   getting the owner, 71  
   setting the owner, 71  
   converting, 72  
 Selection, **480**  
 SelectionClear, 71, 197, 200, 227, **229**  
 SelectionNotify, 72, 197, 200, 227, **230**, 239  
 SelectionRequest, 71, 72, 197, 200, 227, **229**  
 SendEvent, 198, 439  
 Serial Number, 243  
 Server:  
   grabbing, 189  
 Server, **480**  
   grabbing, **481**  
 ServerVendor, **17**  
 setlocale, 273, 274, 275, 476, 477  
 SetModeDelete, 185  
 SetModeInsert, 185  
 Shift, 268, 272, 400  
 ShiftMask, 206, 209, 249, 253  
 Shift sequence, **481**  
 short, 66, 68, 69, 457  
 Sibling, **481**  
 Source, **129**  
 SouthEastGravity, 36, 59, 403

SouthGravity, 36, 59  
 SouthWestGravity, 36, 59, 403  
 special, 6  
 Stacking order, 2, **481**  
 Standard Colormaps, 375  
 State-dependent encoding, **481**  
 StateHint, 355  
 State-independent encoding, **481**  
 StaticColor, 31, 32, 80, 86, **481**  
 StaticGravity, 37, 59  
 StaticGray, 31, 32, 76, 80, 86, 477, **481**  
 Status, 3, 85, **481**  
 StatusDoneCallback, **337**  
 StatusDrawCallback, **337**  
 StatusStart, 337  
 StatusStartCallback, **336**

<

<stdio.h>, 457

## S

Stipple, **481**  
 StippleShape, 140, 141  
 StringConversionCallback, **330**  
 STRING encoding, **481**  
 String Equivalence, **481**  
 Strings:  
   drawing, 175  
 strlen, 392  
 strtok, 276  
 StructureNotify, 217, 218, 220, 221, 222, 223  
 StructureNotifyMask, 200, 217, 218, 219, 220, 221, 222  
 SubstructureNotify, 217, 218, 220, 221, 222, 223  
 SubstructureNotifyMask, 200, 201, 217, 218, 219, 220, 221, 222, 345  
 SubstructureRedirectMask, 38, 43, 46, 48, 49, 50, 51, 52, 53, 200, 224, 225, 226, 232, 345  
 Success, 68, 346, 348, 349  
 SyncBoth, 256, 257  
 SyncHandle, 455  
 SyncKeyboard, 256, 257, 258  
 SyncPointer, 256, 257, 258

## T

Text:  
   drawing, 173  
 this, 6  
 Tile, 2  
   mode, 33

pixmaps, 33  
 Tile, **482**  
 TileShape, 140, 141  
 Time, **248**  
 Timestamp, **482**  
 TopIf, 46, 47, 48  
 True, **4**, 23, 29, 38, 43, 59, 61, 62, 68, 93, 94, 97,  
 106, 107, 109, 123, 129, 148, 149, 163, 166, 184,  
 198, 200, 203, 206, 208, 216, 219, 221, 222, 223,  
 227, 229, 232, 234, 235, 236, 237, 238, 239, 240,  
 242, 250, 254, 266, 274, 281, 287, 291, 292, 311,  
 312, 315, 338, 348, 356, 387, 388, 389, 390, 393,  
 399, 407, 434, 440, 442, 454  
 TrueColor, 31, 32, 80, 86, **482**  
 Type, **482**

## U

Ungrabbing:  
   pointer, 250  
   buttons, 253  
   keyboard, 254  
   keys, 256  
 UngrabKeyboard, 255  
 UngrabPointer, 251  
 UnlockDisplay, **451**  
 UnmapGravity, 37, 59, 223  
 UnmapNotify, 37, 45, 197, 201, 207, 211, 217,  
**222**, 223, 345  
 UnmapNotify Event, 45  
 UnmapWindow, 184, 185  
 unsigned, 322, 326, 439, 457  
 Unsorted, 144, 145  
 UrgencyHint, 355, 357  
 USPosition, 358  
 USSize, 358

## V

Value, 118  
   maximum, 118  
 Value, 119  
   maximum, 119  
   minimum, 119  
 VendorRelease, **18**  
 Vertex, 465, **466**  
 VertexCurved, **466**, 467  
 VertexDontDraw, **466**, 467  
 VertexDrawLastPoint, 465  
 VertexEndClosed, **466**, 467  
 VertexRelative, **466**  
 VertexStartClosed, 465, **466**, 467  
 Viewable, **482**

VisibilityChangeMask, 200, 223  
 VisibilityFullyObscured, 223, 224  
 VisibilityNotify, 39, 197, 207, 211, 217, **223**  
 VisibilityPartiallyObscured, 223, 224  
 VisibilityUnobscured, 223, 224  
 Visible, **482**  
 Visual, **31**, 32, 58, 412, 445  
 VisualAllMask, 410  
 VisualBitsPerRGBMask, 410  
 VisualBlueMaskMask, 410  
 Visual Classes:  
   GrayScale, 31  
   PseudoColor, 31  
   StaticColor, 31  
   StaticGray, 31  
   TrueColor, 31  
 VisualClassMask, 410  
 VisualColormapSizeMask, 410  
 VisualDepthMask, 410  
 VisualGreenMaskMask, 410  
 VisualID, 450  
 VisualIDMask, 410  
 VisualNoMask, 410  
 VisualOfCCC, **102**  
 VisualRedMaskMask, 410  
 VisualScreenMask, 410  
 Visual Type, **31**  
 VoidSymbol, 267

## W

wctomb, 276  
 WestGravity, 36, 59  
 WhenMapped, 23, 37, 53, 59, 215  
 WhitePixel, 10, **11**  
 WhitePixelOfScreen, **21**  
 White point, 85  
 White point adjustment, 85  
   client data, 104  
   procedure, 104  
   setting in Color Conversion Context, 104  
 Whitespace, **482**  
 WidthMMOfScreen, **24**  
 WidthOfScreen, **24**  
 WidthValue, 402  
 WindingRule, 133, 140, 404  
 Window, **2**  
   RootWindow, 17  
   XRootWindow, 17  
 Window, 26, 33  
   attributes, 33  
   mapping, 33  
   InputOnly, 39

background, 54  
 defining the cursor, 56  
 undefining the cursor, 56  
 clearing, 148  
 managers, 189  
 Window, 321  
 name, 352  
 icon name, 354  
 determining location, 401  
 Window, 450, 452  
 determining location, 464  
 IDs, 467  
 InputOnly, **476**  
 InputOutput, **476**  
 parent, **478**  
 root, **480**  
 gravity, **482**  
 manager, **483**  
 WindowGroupHint, 355  
 Windows, 468  
 WithdrawnState, 356

**X**

X10 compatibility:

XDraw, 465  
 XDrawDashed, 465  
 XDrawFilled, 465  
 XDrawPatterned, 465  
 XDrawTiled, 465  
 XDraw, 466  
 XDrawDashed, 466  
 XDrawPatterned, 466  
 XDrawFilled, 467  
 XDrawTiled, 467

<

<X11/cursorfont.h>, 4  
 <X11/keysymdef.h>, 4, 267, 398  
 <X11/keysym.h>, 4, 267  
 <X11/X10.h>, 4, 466  
 <X11/Xatom.h>, 4, 63, 166, 343, 375  
 <X11/Xcms.h>, 3, 79  
 <X11/X.h>, 2, 3, 129, 197, 200  
 <X11/Xlib.h>, 3, 4, 9, 79, 198, 341, 411, 435, 445, 446  
 <X11/Xlibint.h>, 4, 434, 448, 449, 451  
 <X11/Xproto.h>, 4, 216, 243, 449, 450, 451  
 <X11/Xprotostr.h>, 4  
 <X11/Xresource.h>, 3, 379  
 <X11/Xutil.h>, 3, 355, 357, 362, 367, 402, 403,

410, 413, 418, 460

**X**

XActivateScreenSaver, **192**  
 XAddConnectionWatch, **29**  
 XAddExtension, **436**  
 XAddHost, **194**  
 XAddHosts, **194**  
 XAddPixel, **414**  
 XAddToExtensionList, 445, **446**  
 XAddToSaveSet, **185**, 186  
 XAllocClassHint, **362**  
 XAllocColor, 87, **89**, 90, 92, 95, 111  
 XAllocColorCells, 86, 87, **92**, 93, 95  
 XAllocColorPlanes, 86, 87, **93**, 94, 95, 375  
 XAllocIconSize, **367**  
 XAllocID, **446**, 452  
 XAllocIDs, **446**  
 XAllocNamedColor, 83, 87, **91**, 92, 95

—

\_XAllocScratch, **456**

**X**

XAllocSizeHints, **358**  
 XAllocStandardColormap, **374**

—

\_XAllocTemp, **456**, 457

**X**

XAllocWMHints, **355**  
 XAllowEvents, 248, 250, 254, **256**, 257, 258  
 XAllPlanes, **10**  
 XAnyEvent, **198**  
 XAppendVertex, 465  
 XArc, **151**  
 XAssocTable, 467, 468, 469  
 XAutoRepeatOff, **264**  
 XAutoRepeatOn, **264**  
 XBaseFontNameListOfFontSet, 287, **290**  
 XBell, **264**  
 XBitmapBitOrder, **19**  
 XBitmapPad, **19**  
 XBitmapUnit, **19**  
 XBlackPixel, **11**  
 XBlackPixelOfScreen, **21**  
 XBufferOverflow, 340

XButtonEvent, **204**  
 XButtonPressedEvent, **204**, 206  
 XButtonReleasedEvent, **204**, 206  
 Xcalloc, 456  
 XCellsOfScreen, **21**  
 XChangeActivePointerGrab, 203, **251**  
 XChangeGC, **134**, 135, 145, 452  
 XChangeKeyboardControl, 261, **263**, 264  
 XChangeKeyboardMapping, 221, **270**  
 XChangePointerControl, **266**  
 XChangeProperty, 15, **69**, 228, 229  
 XChangeSaveSet, **185**  
 XChangeWindowAttributes, 33, **53**, 54, 87, 187, 227, 231  
 XChar2b, **161**, 171, 172, 175  
 XCharStruct, **161**, 163, 164, 169, 170, 171, 172  
 XCheckIfEvent, 234, **235**  
 XCheckMaskEvent, **237**, 238  
 XCheckTypedEvent, **238**  
 XCheckTypedWindowEvent, **238**, 239  
 XCheckWindowEvent, **236**, 237  
 XCirculateEvent, **217**  
 XCirculateRequestEvent, **224**  
 XCirculateSubwindows, **51**, 52, 217, 224  
 XCirculateSubwindowsDown, **52**, 217, 224  
 XCirculateSubwindowsUp, **51**, 52, 217, 224  
 XClassHint, **362**, 363, 368, 369, 370, 371  
 XClearArea, **147**, 148  
 XClearVertexFlag, 465  
 XClearWindow, 53, **148**  
 XClientMessageEvent, **227**  
 XClipboard, **405**  
 XCloseDisplay, **26**, 437  
 XCloseIM, 303, 307, **309**, 314, 322  
 XCloseOM, **279**, 280  
 XcmsAddColorSpace, 107, 110, **120**, 121  
 XcmsAddFunctionSet, 120, **124**, 125  
 XcmsAllocColor, **90**, 110  
 XcmsAllocNamedColor, 83, **91**, 92  
 XcmsCCC, 101, 125  
 XcmsCCCOFColormap, **100**  
 XcmsCIELab, **81**, 110  
 XcmsCIELabClipab, 108  
 XcmsCIELabClipL, 108  
 XcmsCIELabClipLab, 108  
 XcmsCIELabFormat, 81, 124  
 XcmsCIELabQueryMaxC, 108, **113**, 114  
 XcmsCIELabQueryMaxL, **114**  
 XcmsCIELabQueryMaxLC, **114**, 115  
 XcmsCIELabQueryMinL, **115**  
 XcmsCIELabToCIEXYZ, 124  
 XcmsCIELabWhiteShiftColors, 110  
 XcmsCIELuv, **81**, 110  
 XcmsCIELuvClipL, 108  
 XcmsCIELuvClipLuv, 108  
 XcmsCIELuvClipuv, 108  
 XcmsCIELuvFormat, 81, 124  
 XcmsCIELuvQueryMaxC, 108, **116**  
 XcmsCIELuvQueryMaxL, **116**  
 XcmsCIELuvQueryMaxLC, **116**, 117  
 XcmsCIELuvQueryMinL, **117**  
 XcmsCIELuvToCIEuvY, 124  
 XcmsCIELuvWhiteShiftColors, 110  
 XcmsCIEuvY, **81**, 110, 111  
 XcmsCIEuvYFormat, 81, 103, 124  
 XcmsCIEuvYToCIELuv, 124  
 XcmsCIEuvYToCIEXYZ, 124  
 XcmsCIEuvYToTekHVC, 124  
 XcmsCIExyY, **81**  
 XcmsCIExyYFormat, 81, 103, 124  
 XcmsCIExyYToCIEXYZ, 124  
 XcmsCIEXYZ, **81**, 106, 107, 110  
 XcmsCIEXYZFormat, 81, 103, 124  
 XcmsCIEXYZToCIELab, 124  
 XcmsCIEXYZToCIEuvY, 124  
 XcmsCIEXYZToCIExyY, 124  
 XcmsCIEXYZToRGBi, 124  
 XcmsClientWhitePointOfCCC, **102**  
 XcmsColor, **80**, 92, 96, 97, 99, 100, 106, 107, 109, 120, 122, 123  
 XcmsColorFormat, 81  
 XcmsColorSpace, 121, 122, 123, 124, 125  
 XcmsColorSpaces, 121  
 XcmsCompressionProc, **107**  
 XcmsConvertColors, **106**  
 XcmsCreateCCC, **104**, 105  
 XcmsDefaultCCC, **101**  
 XcmsDisplayOfCCC, **101**  
 XcmsFailure, 85, 89, 90, 103, 104, 106, 114, 115, 116, 117, 126  
 XcmsFormatOfPrefix, 81, **121**, 122, 124  
 XcmsFreeCCC, 101, 104, **105**  
 XcmsFunctionSet, 125, 126  
 XcmsInitFailure, 126  
 XcmsInitNone, 126  
 XcmsInitSuccess, 126  
 XcmsLookupColor, 83, **88**, 89, 92  
 XcmsPad, **81**  
 XcmsParseStringProc, **122**  
 XcmsPerScrnInfo, 125, 126  
 XcmsPrefixOfFormat, 81, **121**, 122, 124  
 XcmsQueryBlack, **111**  
 XcmsQueryBlue, **112**  
 XcmsQueryColor, 97, **99**  
 XcmsQueryColors, 97, **99**, 100  
 XcmsQueryGreen, **112**

XcmsQueryRed, **112**, 113  
 XcmsQueryWhite, **113**  
 XcmsRGB, **81**, 83, 110, 111  
 XcmsRGBFormat, 81, 90, 92, 106, 124  
 XcmsRGBi, **81**, 83, 106, 107, 110, 111  
 XcmsRGBiFormat, 81, 106, 124  
 XcmsRGBiToCIEXYZ, 124  
 XcmsRGBiToRGB, 124  
 XcmsRGBToRGBi, 124  
 XcmsScreenFreeProc, **126**  
 XcmsScreenInitProc, **125**  
 XcmsScreenNumberOfCCC, **102**  
 XcmsScreenWhitePointOfCCC, **102**  
 XcmsSetCCCOfColormap, **101**  
 XcmsSetCompressionProc, **103**  
 XcmsSetWhiteAdjustProc, **104**  
 XcmsSetWhitePoint, **103**  
 XcmsStoreColor, **96**, 97  
 XcmsStoreColors, **97**  
 XcmsSuccess, 85, 89, 97, 121, 126  
 XcmsSuccessWithCompression, 85, 89  
 XcmsTekHVC, **81**, 110  
 XcmsTekHVCclipC, 109  
 XcmsTekHVCclipV, 109  
 XcmsTekHVCclipVC, 109  
 XcmsTekHVCFormat, 81, 124  
 XcmsTekHVCQueryMaxC, 111, **117**, 118  
 XcmsTekHVCQueryMaxV, **118**  
 XcmsTekHVCQueryMaxVC, **118**, 119  
 XcmsTekHVCQueryMaxVSamples, **119**  
 XcmsTekHVCQueryMinV, **119**, 120  
 XcmsTekHVCToCIEuvY, 124  
 XcmsTekHVCWhiteShiftColors, 110  
 XcmsUndefinedFormat, 81, 88, 91, 103, 121  
 XcmsVisualOfCCC, **102**  
 XcmsWhiteAdjustProc, **109**  
 XCNOENT, 419  
 XCNOEMEM, 419  
 XColor, 77, **80**, 83, 90, 95, 96, 97, 98, 99  
 XColormapEvent, **227**  
 XComposeStatus, 400  
 XCompoundTextStyle, 347  
 XConfigureEvent, **218**  
 XConfigureRequestEvent, **225**  
 XConfigureWindow, 45, **47**, 48, 218, 220, 225, 226  
 XConnectionNumber, **11**  
 XContextDependentDrawing, **292**  
 XContextualDrawing, 281, **291**, 292  
 XConvertCase, **397**, 398  
 XConverterNotFound, 347, 348  
 XConvertSelection, **72**, 229  
 XCopyArea, 133, 146, **148**, 149, 200, 216  
 X\_CopyArea, 216  
 XCopyColormapAndFree, **86**, 87  
 XCopyGC, **134**  
 XCopyPlane, 73, 133, 146, **149**, 150, 200, 216  
 X\_CopyPlane, 216  
 XCreateAssocTable, **468**  
 XCreateBitmapFromData, **418**  
 XCreateColormap, **86**, 95, 374  
 XCreateFontCursor, **74**, 433  
 XCreateFontSet, 275, 284, 286, **287**, 288, 289, 290, 291, 294, 296, 298, 299, 349, 350  
 XCreateGC, 127, **134**, 135, 145, 216, 404, 452  
 XCreateGlyphCursor, **74**, 75  
 XCreateIC, 275, 303, **316**, 319, 323  
 XCreateImage, **412**, 413, 414  
 XCreateOC, 275, **282**, 284, 287  
 XCreatePixmap, **73**, 452  
 XCreatePixmapCursor, **75**, 76  
 XCreatePixmapFromBitmapData, **417**, 418  
 XCreateRegion, **404**  
 XCreateSimpleWindow, 39, **41**, 42, 187, 219  
 XCreateWindow, 33, **39**, 40, 41, 53, 87, 187, 219, 231  
 XCreateWindowEvent, **219**  
 XCrossingEvent, **207**  
 —  
 \_Xdebug, 242  
**X**  
 XDefaultColormap, **11**  
 XDefaultColormapOfScreen, **22**  
 XDefaultDepth, **12**  
 XDefaultDepthOfScreen, **22**  
 XDefaultGC, **12**  
 XDefaultGCOfScreen, **22**  
 XDefaultRootWindow, **13**  
 XDefaultScreen, 8, 9, **13**  
 XDefaultScreenOfDisplay, **13**  
 XDefaultString, **349**  
 XDefaultVisual, **14**  
 XDefaultVisualOfScreen, **22**  
 XDefineCursor, 41, **56**  
 XDeleteAssoc, **469**  
 XDeleteContext, **419**  
 XDeleteModifiermapEntry, **271**  
 XDeleteProperty, **70**, 229  
 XDestroyAssocTable, **469**  
 XDestroyIC, 314, **316**, 322  
 XDestroyImage, 413, **414**  
 XDestroyOC, **282**, 285, 286

XDestroyRegion, **404**  
 XDestroySubwindows, **42**, 219  
 XDestroyWindow, **42**, 219  
 XDestroyWindowEvent, **220**  
 XDirectionalDependentDrawing, 281, **291**  
 XDisableAccessControl, **196**  
 XDisplayCells, 10, **14**  
 XDisplayHeight, 10, **20**  
 XDisplayHeightMM, 10, **20**  
 XDisplayKeycodes, **268**, 269, 270  
 XDisplayMotionBufferSize, **241**  
 XDisplayName, **246**  
 XDisplayOfIM, **310**  
 XDisplayOfOM, **279**  
 XDisplayOfScreen, **23**  
 XDisplayPlanes, 10, **14**  
 XDisplayString, **15**  
 XDisplayWidth, 10, **20**  
 XDisplayWidthMM, 10, **21**  
 XDoesBackingStore, **23**  
 XDoesSaveUnders, **23**  
 xDoSomethingReply, **450**  
 xDoSomethingReq, **449**, 452  
 XDraw, 465, **466**  
 XDrawArc, 132, **156**, 157  
 XDrawArcs, 15, **156**, 157  
 XDrawDashed, 465, 466  
 XDrawFilled, 465, **467**  
 XDrawImageString, 173, **176**, 177, 178, 296  
 XDrawImageString16, 176, **177**, 178  
 XDrawLine, 132, 147, **152**, 154  
 XDrawLines, 15, 152, **153**, 154, 465  
 XDrawPatterned, 465, 466  
 XDrawPoint, 147, **151**, 152, 447  
 XDrawPoints, 15, 151, **152**  
 XDrawRectangle, 132, 147, **154**, 155  
 XDrawRectangles, 15, 154, **155**  
 XDrawSegments, 15, 132, 152, **153**, 154, 465  
 XDrawString, **175**, 176, 296  
 XDrawString16, **175**, 176  
 XDrawText, 132, **173**, 174, 175, 296  
 XDrawText16, 132, 173, **174**, 175  
 XDrawTiled, 465, 467  
 XEObject, 445  
 XEHeadOfExtensionList, **445**  
 XEmptyRegion, **407**  
 XEnableAccessControl, **196**  
 XEnterWindowEvent, **207**, 209, 210  
 XEqualRegion, **407**  
 XErrorEvent, 243, 442, 444  
 XESetBeforeFlush, **444**  
 XESetCloseDisplay, **436**, 437  
 XESetCopyGC, **437**, 438, 444  
 XESetCreateFont, **438**, 439  
 XESetCreateGC, **437**  
 XESetError, **442**  
 XESetErrorString, **443**  
 XESetEventToWire, 439, **441**  
 XESetFlushGC, **444**  
 XESetFreeFont, **439**  
 XESetFreeGC, **438**  
 XESetPrintErrorValues, **443**  
 XESetWireToError, **441**, 442, 444  
 XESetWireToEvent, 439, **440**  
 XEvent, **198**, 199, 234, 235, 236, 237, 238, 239, 240, 338, 439  
 xEvent, 440  
 XEvent, 440  
 xEvent, 441  
 XEvent, 441, 442, 444  
 XEventMaskOfScreen, **23**  
 XEventsQueued, 17, **233**  
 XExposeEvent, **215**  
 XExtCodes, **435**, 436, 457, 458  
 XExtData, **445**  
 XExtendedMaxRequestSize, **15**  
 XExtentsOfFontSet, 275, **292**, 293  
 XFetchBuffer, **409**  
 XFetchBytes, 408, **409**  
 XFetchName, **353**  
 XFillArc, 132, 147, **160**, 161  
 XFillArcs, 15, 133, **160**, 161  
 XFillPolygon, 15, 132, 133, **159**, 160  
 XFillRectangle, 132, 147, **158**, 159  
 XFillRectangles, 15, **158**, 159  
 XFilterEvent, **338**  
 XFindContext, **419**, 420  
 XFindOnExtensionList, **446**  
 XFlush, **232**  
 XFlushGC, **136**  
 —  
 \_XFlushGCCache, **447**  
**X**  
 XFocusChangeEvent, **211**  
 XFocusInEvent, **211**, 212, 213, 214  
 XFocusOutEvent, **211**, 212, 213, 214  
 XFontProp, **161**  
 XFontSet, 275, 278, 282, 287, 288, 289, 290, 292, 293, 294, 296, 298, 299, 326, 349, 470  
 XFontSetExtents, 291, **292**, 293  
 XFontsOfFontSet, 284, **289**  
 XFontStruct, **161**, 163, 165, 166, 169, 170, 173,

286, 289, 290, 291, 445  
 XFontStructs, 289  
 XFontStructSet, 286, 290  
 XForceScreenSaver, **191**, 192  
 XFree, 12, 18, **25**, 26, 30, 58, 65, 68, 188, 195, 242, 269, 277, 281, 310, 313, 315, 317, 319, 330, 348, 350, 353, 355, 357, 358, 362, 363, 365, 366, 367, 368, 374, 385, 409, 411, 416, 456  
 XFreeColormap, **87**, 227  
 XFreeColors, 86, **94**, 95  
 XFreeCursor, 39, **77**, 78  
 XFreeExtensionList, **435**  
 XFreeFont, 75, **166**, 439  
 XFreeFontInfo, 165, **168**  
 XFreeFontNames, **167**, 168  
 XFreeFontPath, **189**  
 XFreeFontSet, 286, 289, 290, **291**, 293  
 XFreeGC, **136**  
 XFreeModifiermap, **271**, 272  
 XFreePixmap, **73**, 74, 416, 418  
 XFreeStringList, 289, 349, **350**, 372

—

\_XFreeTemp, **456**

**X**

XGContextFromGC, **136**, 165  
 XGCValues, **127**, 135  
 xGenericReply, 451  
 XGeometry, **464**  
 XGetAtomName, **65**, 66  
 XGetAtomNames, **65**, 66  
 XGetClassHint, **363**  
 XGetCommand, **371**, 372  
 XGetDefault, 464, **465**  
 XGetErrorDatabaseText, **245**, 246, 275  
 XGetErrorText, **245**, 275, 443  
 XGetFontPath, **188**, 189  
 XGetFontProperty, **166**  
 XGetGCValues, **135**  
 XGetGeometry, **59**, 60  
 XGetIconName, **354**, 355  
 XGetIconSizes, **367**, 368  
 XGetICValues, 308, **318**, 319, 325  
 XGetImage, **180**, 181, 182, 412, 413, 414  
 XGetIMValues, 304, 306, 308, **310**, 312, 315, 320, 322, 323, 324, 327  
 XGetInputFocus, **260**, 261  
 XGetKeyboardControl, **263**  
 XGetKeyboardMapping, **269**, 270  
 XGetModifierMapping, **272**  
 XGetMotionEvents, 204, **241**, 242  
 XGetNormalHints, **460**, 461, 462  
 XGetOCValues, **283**, 284, 285, 286  
 XGetOMValues, **279**, 280, 285  
 XGetPixel, **413**  
 XGetPointerControl, **266**, 267  
 XGetPointerMapping, **265**, 266  
 XGetRGBColormap, 463  
 XGetRGBColormaps, 326, **377**  
 XGetScreenSaver, **192**  
 XGetSelectionOwner, **71**, 72  
 XGetSizeHints, **462**  
 XGetStandardColormap, **463**  
 XGetSubImage, **181**, 182, 183  
 XGetTextProperty, **351**, 352, 354, 373  
 XGetTransientForHint, **364**  
 XGetVisualInfo, **410**, 411  
 XGetWindowAttributes, **58**, 59  
 xGetWindowAttributesReply, 454  
 XGetWindowProperty, **66**, 67, 68, 69, 229  
 XGetWMClientMachine, **372**, 373  
 XGetWMColormapWindows, **366**, 367  
 XGetWMHints, **357**  
 XGetWMIconName, **354**  
 XGetWMName, **352**  
 XGetWMNormalHints, **360**, 361, 460  
 XGetWMProtocols, **365**  
 XGetWMSizeHints, **361**, 362, 462  
 XGetZoomHints, **461**, 462  
 XGrabButton, 203, **251**, 252, 253, 257  
 XGrabKey, **255**, 256, 257  
 XGrabKeyboard, 214, 248, **253**, 254, 255, 256, 257  
 XGrabPointer, 207, 210, 248, **249**, 250, 251, 252, 257  
 XGrabServer, **189**  
 XGraphicsExposeEvent, 198, **216**, 217  
 XGravityEvent, **220**  
 XHeightMMOfScreen, **24**  
 XHeightOfScreen, **24**  
 XHostAddress, **193**  
 XIC, 275, 303, 304  
 XICCEncodingStyle, **347**  
 XIconifyWindow, **345**  
 XIconSize, 343, **367**  
 XID, **4**  
 XIfEvent, 234, **235**  
 XIM, 273, 275, 302, 303, 338  
 XIMAbsolutePosition, **336**  
 XImage, **178**, 180, 181, 182, 411, 412, 414  
 XImageByteOrder, **19**  
 XIMBackwardChar, 331, **336**  
 XIMBackwardWord, **336**

XIMCallback, 314, 321, 322, 327, **328**  
 XIMCaretDirection, 330, 331, **335**  
 XIMCaretDown, **336**  
 XIMCaretStyle, **335**  
 XIMCaretUp, **336**  
 XIMDontChange, **336**  
 XIMFeedback, 315, 334, 338  
 XIMForwardChar, 331, **336**  
 XIMForwardWord, **336**  
 XIMHighlight, **334**  
 XIMHotKeyStateOFF, 324  
 XIMHotKeyStateON, 323, 324  
 XIMHotKeyTriggers, 323, 324  
 XIMInitialState, 317, **323**, 327  
 XIMLineEnd, 331, **336**  
 XIMLineStart, **336**  
 XIMNextLine, **336**  
 XIMOfIC, **317**, 318  
 XIMPreeditArea, 304, , **313**, 325  
 XIMPreeditCallbacks, **313**, 327  
 XIMPreeditCaretCallbackStruct, **335**  
 XIMPreeditDisable, 326, 327  
 XIMPreeditDrawCallbackStruct, 315, **332**  
 XIMPreeditEnable, **326**, 327  
 XIMPreeditNone, **313**  
 XIMPreeditNothing, **313**  
 XIMPreeditPosition, **313**, 325  
 XIMPreeditStateNotifyCallbackStruct, **327**  
 XIMPreeditUnknown, 326  
 XIMPreserveState, 317, 323  
 XIMPreviousLine, **336**  
 XIMPrimary, **334**  
 XIMProc, **328**  
 XIMResetState, 323  
 XIMReverse, **334**  
 XIMSecondary, **334**  
 XIMStatusArea, 304, **313**, **314**, 325  
 XIMStatusCallbacks, **313**, **314**, 328  
 XIMStatusDataType, **337**  
 XIMStatusDrawCallbackStruct, **337**  
 XIMStatusNone, **313**, **314**  
 XIMStatusNothing, **313**, **314**  
 XIMStringConversionCallbackStruct, 307, **330**,  
 331  
 XIMStringConversionOperation, 331  
 XIMStringConversionPosition, 330  
 XIMStringConversionRetrieval, 330, 331  
 XIMStringConversionSubstitution, 330, 331  
 XIMStringConversionText, 322, 330  
 XIMStyle, **313**  
 XIMStyles, 304, **313**  
 XIMTertiary, **334**  
 XIMText, 305, 315, 332, 333, 334, 338  
 XIMUnderline, **334**  
 XIMValuesList, 315  
 XIMVisibleCenter, 333, **334**  
 XIMVisibleToBackward, 333, **334**, 338  
 XIMVisibleToCenter, 338  
 XIMVisibleToForward, 333, **334**, 338  
 XInitExtension, 435, **436**, 446, 457  
 XInitImage, **179**  
 XInitThreads, **28**  
 XINPreserveState, **323**  
 XInsertModifiermapEntry, **271**  
 XInstallColormap, 38, 53, 80, **186**, 187, 227  
 XInternalConnectionNumbers, **30**  
 XInternAtom, 62, **64**, 65  
 XInternAtoms, **65**  
 XIntersectRegion, **405**  
 XKeyboardControl, **261**, 263  
 XKeyboardState, **263**  
 XKeycodeToKeysym, **396**, 397  
 XKeyEvent, **204**  
 XKeymapEvent, **214**  
 XKeyPressedEvent, **204**, 206, 396, 400  
 XKeyReleasedEvent, **204**, 206, 396, 400  
 XKeysymToKeycode, **397**  
 XKeysymToString, **398**  
 XKillClient, **190**, 375  
 XLastKnownRequestProcessed, **16**  
 XLeaveWindowEvent, **207**, 209, 210  
 XLFD, **483**  
 XlibSpecificationRelease, **3**  
 XListDepths, **12**  
 XListExtensions, 434, **435**  
 XListFonts, **167**  
 XListFontsWithInfo, **167**, 168  
 XListHosts, **194**, 195  
 XListInstalledColormaps, **187**, 188  
 XListPixmapFormats, **18**  
 XListProperties, **68**  
 XLoadFont, **164**, 165, 166  
 XLoadQueryFont, 161, **165**, 166, 168, 439  
 XLocaleNotSupported, 274, 347, 348  
 XLocaleOfFontSet, **290**  
 XLocaleOfIM, 275, **310**  
 XLocaleOfOM, 275, **279**, 280  
 XLockDisplay, **28**, 29, 234  
 XLookupAssoc, **468**, 469  
 XLookupBoth, 340  
 XLookupChars, 340  
 XLookupColor, 83, **87**, 88  
 XLookupKeySym, 340  
 XLookupKeysym, **396**  
 XLookupNone, 340  
 XLookupString, **400**, 401

- XLowerWindow, **50**, 51, 218, 225
- XMakeAssoc, **468**
- Xmalloc, 456
- XMapEvent, **221**
- XMappingEvent, **221**
- XMapRaised, **44**, 218, 220, 225
- XMapRequestEvent, **226**
- XMapSubwindows, **44**, 220, 225
- XMapWindow, 33, 41, 42, **43**, 44, 220, 225, 226
- X\_MapWindow, 452
- XMaskEvent, **237**
- XMatchVisualInfo, 12, **411**
- XMaxCmapsOfScreen, **24**
- XMaxRequestSize, **15**
- XmbDrawImageString, **298**, 299
- XmbDrawString, 291, **298**
- XmbDrawText, 275, 296, **297**, 298
- XmbLookupString, 275, 303, 304, 305, 306, 309, **339**, 340
- XmbPerCharExtents, 292
- XmbResetIC, 306, **317**, 323, 327
- XmbSetWMPProperties, 275, **368**, 369, 370
- XmbTextEscapement, **293**, 294
- XmbTextExtents, 275, 292, **293**, 294, 296, 298, 299
- XmbTextItem, **296**
- XmbTextListToTextProperty, 275, **347**
- XmbTextPerCharExtents, 291, 294, **295**, 296, 298
- XmbTextPropertyToTextList, 275, **348**, 349, 350, 385
- XMinCmapsOfScreen, **25**
- XModifierKeymap, **270**, 271, 272
- XMotionEvent, **204**
- XMoveResizeWindow, **49**, 50, 218, 220, 225, 226, 452
- XMoveWindow, **48**, 218, 225, 452
- XNArea, 304, 313, 314, **325**, **341**
- XNAreaNeeded, 304, 313, 314, **325**, **341**
- XNBackground, **326**, **341**
- XNBackgroundPixmap, 326, **341**
- XNBaseFontName, 284, 285, **342**
- XNClientWindow, **321**, **341**
- XNColormap, **326**, **341**
- XNContextualDrawing, 280, 281, **342**
- XNCursor, 326, **341**
- XNDefaultString, 285, **342**
- XNDestroyCallback, 307, 312, 314, 322, **341**
- XNDirectionalDependentDrawing, 280, 281, **342**
- XNegative, 402
- XNewModifiermap, **271**
- XNextEvent, 3, 232, **233**, 234, 338
- XNextRequest, **16**
- XNFilterEvents, 305, 316, 318, **321**, **341**
- XNFocusWindow, 313, **321**, 325, **341**
- XNFontInfo, 286, **342**
- XNFontSet, 304, **326**, **341**
- XNForeground, **326**, **341**
- XNGeometryCallback, **321**, **341**
- XNHotKey, 323, 341, **342**
- XNHotKeyState, 323, 324, 341, **342**
- XNInputStyle, 304, 320, 325, **341**
- XNLineSpace, 326, **341**
- XNLineSpacing, 304
- XNMissingCharSet, 285, **342**
- XNoExposeEvent, **216**
- XNOMAutomatic, 286, 287, **342**
- XNoMemory, 347, 348
- XNoOp, **25**
- XNOrientation, 285, **342**
- XNPreeditAttributes, **324**, **341**
- XNPreeditCaretCallback, 313, **327**, **341**
- XNPreeditDoneCallback, 313, **327**, **341**
- XNPreeditDrawCallback, 313, **327**, **341**
- XNPreeditStartCallback, 313, **327**, **341**
- XNPreeditState, 308, 323, 326, 327, 341, **342**
- XNPreeditState., 308
- XNPreeditStateNotifyCallback, 308, 327, **341**
- XNQueryICValuesList, 306, 308, 312, 315, 322, 323, 324, 327, 341, **342**
- XNQueryIMValues, 315
- XNQueryIMValuesList, 312, 315, 341, **342**
- XNQueryInputStyle, 312, 320, **341**
- XNQueryOrientation, 280, 281, 285, **342**
- XNR6PreeditCallbackBehavior, 312, 315, 341, **342**
- XNRequiredCharSet, 280, **342**
- XNResetState, 317, 323, 327, 341, **342**
- XNResourceClass, 285, 286, 312, 314, **321**, **341**
- XNResourceName, 285, 286, 312, 314, **321**, **341**
- XNSeparatorofNestedList, 341
- XNSeparatorofNestedList :  
    , @DEF@""
- XNSpotLocation, 313, **325**, **341**
- XNStatusAttributes, **324**, **341**
- XNStatusDoneCallback, 314, **328**, **341**
- XNStatusDrawCallback, 314, **328**, **341**
- XNStatusStartCallback, 314, **328**, **341**
- XNStdColormap, **326**, **341**
- XNStringConversion, 306, 307, 322, 341, **342**
- XNStringConversionCallback, 306, 307, 322, 341, **342**
- XNVaNestedList, 277, **341**
- XNVisiblePosition, 312, 315, 341, **342**
- XOC, 278, 282, 285, 286, 287
- XOffsetRegion, **405**
- XOM, 273, 275, 278, 280, 287, 291

XOMCharSetList, **280**, 285  
 XOMFontInfo, 286  
 XOMOfOC, **282**, 283  
 XOMOrientation, 281  
 XOMOrientation\_Context, 281, 285  
 XOMOrientation\_LTR\_TTB, 281, 285  
 XOMOrientation\_RTL\_TTB, 281  
 XOMOrientation\_TTB\_LTR, 281  
 XOMOrientation\_TTB\_RTL, 281  
 XOpenDisplay, **8**, 9, 13, 15, 31, 197, 246, 385  
 XOpenIM, 275, 302, 307, **308**, 309  
 XOpenOM, 275, **278**, 279  
 XOrientation, 285  
 XParseColor, 83, **88**  
 XParseGeometry, **401**, 402, 403, 464  
 XPeekEvent, **234**  
 XPeekIfEvent, 234, **235**, 236  
 XPending, 232, **233**  
 Xpermalloc, **401**  
 XPixmapFormatValues, 18  
 XPlanesOfScreen, **25**  
 XPoint, **151**, 154, 325  
 XPointer, **4**, 277  
 XPointerMovedEvent, **204**, 206  
 XPointInRegion, **407**  
 XPolygonRegion, **404**  
 X Portable Character Set, **483**  
 XProcessInternalConnection, **30**  
 XPropertyEvent, **228**  
 XProtocolRevision, **16**  
 XProtocolVersion, **16**  
 XPutBackEvent, **239**  
 XPutImage, 15, **179**, 180, 412, 417  
 XPutPixel, **413**  
 XQLength, **17**, 233  
 XQueryBestCursor, 74, **76**, 77  
 XQueryBestSize, **140**, 141  
 XQueryBestStipple, **141**, 142  
 XQueryBestTile, **141**  
 XQueryColor, **98**  
 XQueryColors, **98**, 99  
 XQueryExtension, **434**, 435  
 XQueryFont, **165**, 166, 439  
 XQueryKeymap, **264**, 265  
 XQueryPointer, 60, **61**, 62, 204  
 XQueryTextExtents, **171**, 172, 178  
 XQueryTextExtents16, **171**, 172  
 XQueryTree, **57**, 58  
  
 XRaiseWindow, 3, **50**, 218, 225  
  
 —  
 \_XRead, 454, 456  
 \_XRead16, 454  
 \_XRead16Pad, 455  
 \_XRead32, 455  
  
**X**  
  
 XReadBitmapFile, **415**, 416  
 XReadBitmapFileData, **416**  
  
 —  
 \_XReadPad, 455  
  
**X**  
  
 XRebindKeysym, **400**, 401  
 XRecolorCursor, 74, **77**  
 XReconfigureWMWindow, **346**  
 XRectangle, **151**, 292, 296, 325  
 XRectangle., 325  
 XRectangles, 296  
 XRectInRegion, **407**, 408  
 XRefreshKeyboardMapping, 222, **397**, 400  
 XRegisterIMInstantiateCallback, 275, 307, **310**,  
 311  
 XRemoveConnectionWatch, **29**  
 XRemoveFromSaveSet, **186**  
 XRemoveHost, **195**  
 XRemoveHosts, **195**  
 XReparentEvent, **222**  
 XReparentWindow, **184**, 185, 220, 222  
 xReply, 453  
  
 —  
 \_XReply, 442, 443, **453**, 454, 456  
  
**X**  
  
 xReq, 447, 450  
 XResetScreenSaver, **192**  
 XResizeRequestEvent, **226**  
 XResizeWindow, **49**, 218, 220, 225, 226  
 XResourceManagerString, **384**, 385  
 xResourceReq, **450**  
 XRestackWindows, **52**, 53, 218, 225  
 XrmBindingList, 383  
 XrmBindLoosely, 383

XrmBindTightly, 383  
 XrmCombineDatabase, **387**  
 XrmCombineFileDatabase, **386**, 387  
 XrmDatabase, 275, **383**  
 XrmDestroyDatabase, **386**  
 XrmEnumAllLevels, 392, 393  
 XrmEnumerateDatabase, **392**, 393  
 XrmEnumOneLevel, 392, 393  
 XrmGetDatabase, **386**  
 XrmGetFileDatabase, 275, **384**, 385  
 XrmGetResource, **388**, 389, 390  
 XrmGetStringDatabase, 275, **385**  
 XrmInitialize, **384**  
 XrmLocaleOfDatabase, 275, **385**, 386  
 XrmMergeDatabases, **387**, 388  
 XrmOptionDescRec, **394**  
 XrmOptionDescRec.value, 394  
 XrmOptionKind, **393**  
 XrmoptionNoArg, 395  
 XrmoptionSkipArg, 394  
 XrmoptionSkipNArgs, 394  
 XrmParseCommand, 393, **394**  
 XrmPermStringToQuark, **381**, 382  
 XrmPutFileDatabase, 275, **384**  
 XrmPutLineResource, **392**  
 XrmPutResource, 388, **390**  
 XrmPutStringResource, **391**  
 XrmQGetResource, **388**, 390  
 XrmQGetSearchList, **389**, 390  
 XrmQGetSearchResource, 388, **389**, 390  
 XrmQPutResource, 388, 390, **391**, 392  
 XrmQPutStringResource, **391**, 392  
 XrmQuark, 381  
 XrmQuarkToString, **382**  
 XrmSetDatabase, **386**, 465  
 XrmStringToBindingQuarkList, **383**, 390, 391  
 XrmStringToQuark, **381**, 382  
 XrmStringToQuarkList, **382**, 383  
 XrmUniqueQuark, **381**  
 XrmValue, 383, **384**, 392  
 XRootWindow, **17**  
 XRootWindowOfScreen, **25**  
 XRotateBuffers, **409**, 410  
 XRotateWindowProperties, **70**, 228, 229  
 XSaveContext, **418**, 419, 420  
 XScreenCount, **17**  
 XScreenNumberOfScreen, **23**  
 XScreenOfDisplay, **13**  
 XScreenResourceString, **385**  
 XSegment, **151**, 154  
 XSelectInput, **231**, 232  
 XSelectionClearEvent, **229**  
 XSelectionEvent, **230**

XSelectionRequestEvent, **229**

—

\_XSend, 452, 453, 456

## X

XSendEvent, 227, 230, **239**, 240  
 XServerInterpretedAddress, **193**  
 XServerVendor, **17**  
 XSetAccessControl, **196**  
 XSetAfterFunction, **242**  
 XSetArcMode, **145**, 146  
 XSetBackground, **137**, 452  
 XSetClassHint, **362**, 363, 371  
 XSetClipMask, **144**, 145  
 XSetClipOrigin, **143**, 144  
 XSetClipRectangles, 15, 133, 135, **144**, 145  
 XSetCloseDownMode, **26**, 27, 377  
 XSetCommand, 370, **371**  
 XSetDashes, 133, 135, **139**, 140  
 XSetErrorHandler, **243**  
 XSetFillRule, **140**  
 XSetFillStyle, **140**  
 XSetFont, **143**  
 XSetFontPath, 167, **188**  
 XSetForeground, 127, **137**  
 XSetFunction, **138**  
 XSetGraphicsExposures, **146**, 216  
 XSetICFocus, 303, **316**, 317  
 XSetIconName, **354**  
 XSetIconSizes, **367**  
 XSetICValue, 307  
 XSetICValues, 308, **318**, 319, 321, 324  
 XSetIMValue, 307  
 XSetIMValues, **309**, 310, 312  
 XSetInputFocus, **259**, 260  
 XSetIOErrorHandler, **246**, 247

—

\_XSetLastRequestRead, 440, **441**

## X

XSetLineAttributes, 127, **138**, 139  
 XSetLocaleModifiers, **274**, 275, 276, 278, 309  
 XSetModifierMapping, 221, **272**  
 XSetNormalHints, **460**, 462  
 XSetOCValues, **283**, 284, 286  
 XSetOMValues, **279**  
 XSetPlaneMask, **138**

XSetPointerMapping, 221, **265**  
 XSetRegion, 15, 133, **404**  
 XSetRGBColormap, 463  
 XSetRGBColormaps, **376**, 377  
 XSetScreenSaver, **190**, 191  
 XSetSelectionOwner, 27, **71**, 229  
 XSetSizeHints, **462**  
 XSetStandardColormap, **463**  
 XSetStandardProperties, **459**, 460  
 XSetState, **137**  
 XSetStipple, **142**, 143  
 XSetSubwindowMode, **146**  
 XSetTextProperty, **351**, 352, 354, 372  
 XSetTile, **142**  
 XSetTransientForHint, **363**, 364  
 XSetTSTOrigin, **143**  
 XSetWindowAttributes, **33**, 53, 227, 231  
 XSetWindowBackground, **54**, 55  
 XSetWindowBackgroundPixmap, **54**, 55  
 XSetWindowBorder, **55**  
 XSetWindowBorderPixmap, **55**  
 XSetWindowBorderWidth, **50**, 218, 225  
 XSetWindowColormap, **55**, 56, 87, 187, 227  
 XSetWMClientMachine, 369, 370, **372**  
 XSetWMColormapWindows, **366**  
 XSetWMHints, **357**, 368, 369, 371  
 XSetWMIconName, **353**, 354, 370  
 XSetWMName, **352**, 370  
 XSetWMNormalHints, **360**, 361, 369, 371, 460  
 XSetWMPProperties, **370**, 371, 459  
 XSetWMPprotocols, **364**, 365  
 XSetWMSizeHints, **361**, 462  
 XSetZoomHints, **461**, 462  
 XShrinkRegion, **405**  
 XSizeHints, 343, 357, **358**, 360, 361, 403, 460, 462  
 XStandardColormap, **374**, 375, 376, 377, 459, 463  
 XStdICCTextStyle, 347  
 XStoreBuffer, **408**, 409  
 XStoreBytes, **408**  
 XStoreColor, 94, **95**, 96, 97  
 XStoreColors, 94, **96**, 97, 377  
 XStoreName, **352**, 353  
 XStoreNamedColor, 83, 94, **97**, 98  
 XStringListToTextProperty, **349**, 350  
 XStringStyle, 347, 348  
 XStringToKeysym, **398**  
 XSubImage, **413**, 414  
 XSubtractRegion, **406**  
 XSupportsLocale, **274**, 275, 348  
 XSync, 2, 3, 26, **232**  
 XSynchronize, **242**, 455  
 XTextExtents, **169**, 170, 172  
 XTextExtents16, **170**, 172  
 XTextItem, **173**  
 XTextItem16, **173**  
 XTextProperty, **346**, 347, 348, 349, 350, 351, 352, 353, 354, 372  
 XTextPropertyToStringList, **350**  
 XTextStyle, 347  
 XTextWidth, **169**  
 XTextWidth16, **169**  
 XTimeCoord, **241**  
 XTranslateCoordinates, **60**, 61  
 XUndefineCursor, **56**  
 XUGrabButton, **253**  
 XUGrabKey, **256**  
 XUGrabKeyboard, 27, **254**, 255  
 XUGrabPointer, 27, 203, 207, **250**, 251  
 XUGrabServer, 27, **189**, 190  
 XUinstallColormap, 80, 87, 186, **187**, 227  
 XUnionRectWithRegion, **406**  
 XUnionRegion, **406**  
 XUniqueContext, **420**  
 XUnloadFont, 165, **166**, 168  
 XUnlockDisplay, **28**  
 XUnmapEvent, **223**  
 XUnmapSubwindows, **45**  
 XUnmapWindow, **44**, 45  
 XUnregisterIMInstantiateCallback, 275, 307, **311**, 312  
 XUnsetICFocus, 303, 316, **317**  
 XVaCreateNestedList, 277  
 XValue, 402  
 XVaNestedList, 277, 319  
 XVendorRelease, **18**  
 XVisibilityEvent, **223**, 224  
 XVisualIDFromVisual, **32**  
 XVisualInfo, 31, **410**  
 XWarpPointer, **259**  
 XWatchProc, **29**  
 XwcDrawImageString, **298**, 299  
 XwcDrawString, **298**  
 XwcDrawText, 275, 296, **297**, 298  
 XwcFreeStringList, **349**  
 XwcLookupString, 275, 303, 304, 305, 306, 309, **339**, 340  
 XwcPerCharExtents, 292  
 XwcResetIC, 306, 317, 323, 327  
 XwcTextEscapement, **293**, 294  
 XwcTextExtents, 275, 292, **293**, 294, 296, 298, 299  
 XwcTextItem, **296**  
 XwcTextListToTextProperty, 275, **347**  
 XwcTextPerCharExtents, 291, 294, **295**, 296, 298  
 XwcTextPropertyToTextList, 275, **348**, 349

XWhitePixel, **11**  
XWhitePixelOfScreen, **21**  
XWidthMMOfScreen, **24**  
XWidthOfScreen, **24**  
XWindowAttributes, **58**  
XWindowChanges, **45**, 47, 48, 346  
XWindowEvent, 3, 232, **236**  
XWithdrawWindow, **345**, 346  
XWMGeometry, **402**, 403, 464  
XWMHints, 343, **355**, 357, 368, 370  
XWriteBitmapFile, **416**, 417, 418  
XXorRegion, **406**  
XYBitmap, 180, 412  
XY format, **483**  
XYPixmap, 180, 181, 182, 412

## **Y**

YNegative, 402  
YSorted, 144, 145  
YValue, 402  
YXBanded, 144, 145  
YXSorted, 144, 145

## **Z**

Z format, **483**  
ZPixmap, 180, 181, 182, 412