XmbLookupString, XwcLookupString – obtain composed input from an input method

```c
int XmbLookupString(ic, event, buffer_return, bytes_buffer, keysym_return, status_return)
    XIC ic;
    XKeyPressEvent *event;
    char *buffer_return;
    int bytes_buffer;
    KeySym *keysym_return;
    Status *status_return;

int XwcLookupString(ic, event, buffer_return, bytes_buffer, keysym_return, status_return)
    XIC ic;
    XKeyPressEvent *event;
    wchar_t *buffer_return;
    int wchars_buffer;
    KeySym *keysym_return;
    Status *status_return;
```

- `buffer_return` Returns a multibyte string or wide character string (if any) from the input method.
- `bytes_buffer` Specifies space available in the return buffer.
- `wchars_buffer` Specifies space available in the return buffer.
- `event` Specifies the key event to be used.
- `ic` Specifies the input context.
- `keysym_return` Returns the KeySym computed from the event if this argument is not NULL.
- `status_return` Returns a value indicating what kind of data is returned.

The XmbLookupString and XwcLookupString functions return the string from the input method specified in the buffer_return argument. If no string is returned, the buffer_return argument is unchanged. The KeySym into which the KeyCode from the event was mapped is returned in the keysym_return argument if it is non-NULL and the status_return argument indicates that a KeySym was returned. If both a string and a KeySym are returned, the KeySym value does not necessarily correspond to the string returned. XmbLookupString returns the length of the string in bytes, and XwcLookupString returns the length of the string in characters. Both XmbLookupString and XwcLookupString return text in the encoding of the locale bound to the input method of the specified input context.

Each string returned by XmbLookupString and XwcLookupString begins in the initial state of the encoding of the locale (if the encoding of the locale is state-dependent).

**Note**

To insure proper input processing, it is essential that the client pass only KeyPress events to XmbLookupString and XwcLookupString. Their behavior when a client passes a KeyRelease event is undefined.

Clients should check the status_return argument before using the other returned values. These two functions both return a value to status_return that indicates what has been returned in the other arguments. The possible values returned are:

- `XBufferOverflow` The input string to be returned is too large for the supplied buffer_return. The required size (XmbLookupString in bytes; XwcLookupString in characters) is returned as the value of the function, and the contents of buffer_return and keysym_return are not modified. The client should recall the function with the same event and a buffer of adequate size to obtain the string.
- `XLookupNone` No consistent input has been composed so far. The contents of buffer_return and keysym_return are not modified, and the function returns zero.
- `XLookupChars` Some input characters have been composed. They are placed in the buffer_return argument, and
the string length is returned as the value of the function. The string is encoded in the locale bound to the input context. The content of the keysym_return argument is not modified. T} \text{ XLookupKeySym} T \text{ A KeySym has been returned instead of a string and is returned in keysym_return. The content of the buffer_return argument is not modified, and the function returns zero. T} \text{ XLookupBoth} T \text{ Both a KeySym and a string are returned; XLookupChars and XLookupKeySym occur simultaneously. T}

It does not make any difference if the input context passed as an argument to \text{XmbLookupString} and \text{XwcLookupString} is the one currently in possession of the focus or not. Input may have been composed within an input context before it lost the focus, and that input may be returned on subsequent calls to \text{XmbLookupString} or \text{XwcLookupString} even though it does not have any more keyboard focus.

\text{XLookupKeysym(3X11)}
\text{Xlib – C Language X Interface}