The setlocale Function

```
char *setlocale(int category, const char *locale);
```

setlocale

The setlocale function changes the current locale, either for a single category or for all categories. If the first argument is one of the macros LC_COLLATE, LC_CTYPE, LC_MONETARY, LC_NUMERIC, or LC_TIME, a call of setlocale affects only a single category. If the first argument is LC_ALL, the call affects all categories. The C standard defines only two values for the second argument: "C" and "". Other locales, if any, depend on the implementation.

At the beginning of program execution, the call

```
setlocale(LC_ALL, "C");
```

occurs behind the scenes. In the "C" locale, library functions behave in the "normal" way, and the decimal point is a period.

getenv function ➤26.2

Changing locale after the program has begun execution requires an explicit call of setlocale. Calling setlocale with "" as the second argument switches to the ***native locale,*** allowing the program to adapt its behavior to the local environment. The C standard doesn't define the exact effect of switching to the native locale. Some implementations of setlocale check the execution environment (in the same way as getenv) for an environment variable with a particular name (perhaps the same as the category macro). Other implementations don't do anything at all. (The standard doesn't require setlocale to have any effect. Of course, a library whose version of setlocale does nothing isn't likely to sell too well in some parts of the world.)

Locales

Locales other than "C" and "" vary from one compiler to another. The GNU C library, known as glibc, provides a "POSIX" locale, which is the same as the "C" locale. glibc, which is used by Linux, allows additional locales to be installed if desired. These locales have the form

language [_*territory*] [.*codeset*] [@*modifier*]

where each bracketed item is optional. Possible values for *language* are listed in a standard known as ISO 639, *territory* comes from another standard (ISO 3166), and *codeset* specifies a character set or an encoding of a character set. Here are a few examples:

"swedish"
"en_GB" (English – United Kingdom)
"en_IE" (English – Ireland)
"fr_CH" (French – Switzerland)

There are several variations on the "en_IE" locale, including "en_IE@euro" (using the euro currency), "en_IE.iso88591" (using the ISO/IEC 8859-1 character set),