

# **21. THE STANDARD LIBRARY**

# General Rules

- The C standard library is divided into 15 parts (24 in C99), with each part described by a header.
- The names of functions, types, and macros defined in a header are reserved; programs that include the header shouldn't use these names for any other purpose.
- Identifiers with external linkage (for example, function names) are always reserved, even if the header isn't included.

# C89 Headers

- `<assert.h>` Diagnostics. Contains only the `assert` macro, which enables programs to perform self-checks. If any check fails, the program terminates.

```
#include <assert.h>  
void assert(int expression);  
/* if expression is false, writes a diagnostic  
message and  
terminates execution */
```