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gamma functions^{C99} *See* `lgamma`; `tgamma`.

general utility library^{C89} *See* `stdlib.h`.

getc A function that gets the next character (if any) from the file pointed to by `stream`.

```
#include <stdio.h>
int getc(FILE *stream);
```

`getc` is equivalent to `fgetc` except that `getc` is permitted to be an unsafe macro. *See also* `getwc`.

getchar A function that gets the next character (if any) from `stdin`.

```
#include <stdio.h>
int getchar(void);
```

`getchar()` is equivalent to `getc(stdin)`. Therefore, `getchar` may be implemented as an unsafe macro. *See also* `getwchar`.

getenv A function that searches an environment list for a string that matches that pointed to by `name`.

```
#include <stdlib.h>
char *getenv(const char *name);
```

The environment list is maintained by the host environment, and the set of names available is implementation defined. It is possible that an implementation does not even support environment strings, in which case `getenv` could always fail.

The value returned is a pointer to a string that “matches” the string pointed to by `name`. If no match is found, `NULL` is returned. The behavior is undefined if you attempt to modify the contents of the string pointed to by the return value. *See also* `envp`.

gets A function that reads characters from `stdin` into the array pointed to by `s` until a new-line or end-of-file is encountered.

```
#include <stdio.h>
char *gets(char *s);
```

A `'\0'` is appended after the last-read character in the array. If a new-line is encountered, it is discarded (unlike `fgets`, which retains it). If

`gets` succeeds, it returns `s`. If an end-of-file condition is encountered and no characters have been read yet, `NULL` is returned and the contents of the array pointed to by `s` are unchanged. `NULL` is also returned on a read error; however, the contents of the array are then indeterminate.

`getwc`^{C95} A function that returns the next wide character from the input stream pointed to by `stream`, or `WEOF` if there are no more wide characters.

```
#include <stdio.h>
#include <wchar.h>
wint_t getwc(FILE *stream);
```

This function is equivalent to `fgetwc`, except that if it is implemented as a macro, it might evaluate `stream` more than once.

`getwchar`^{C95} A function that returns the next wide character from the the standard input stream, or `WEOF` if there are none.

```
#include <wchar.h>
wint_t getwchar(void);
```

GMT Abbreviation for Greenwich Mean Time. *See* Universal Time Coordinated.

`gmtime` A function that converts the calendar time pointed to by `timer` into a broken-down time, expressed as Greenwich Mean Time (GMT).

```
#include <time.h>
struct tm *gmtime(const time_t *timer);
```

The value returned is a pointer to the converted object or `NULL` if GMT is not available. GMT is now called Universal Time Coordinated (UTC).

`goto` A keyword used to implement an unconditional branch statement to a user-defined label elsewhere within the same function. The general form is as follows:

```
goto identifier;
```

```
identifier:
    statement
```

For information about nonlocal branches *see* `longjmp`.

greater-than operator A binary operator, `>`, that compares the values of its operands. Both operands either must have arithmetic type or

be pointers to compatible object or incomplete types. The order of evaluation of the operands is unspecified. The result has type `int` and value 0 (if false) or 1 (if true). This operator associates left to right.

greater-than-or-equal-to operator A binary operator, `>=`, that compares the values of its operands. Both operands either must have arithmetic type or be pointers to compatible object or incomplete types. The result has type `int` and value 0 (if false) or 1 (if true). This operator associates left to right.

grouping The manner in which subexpressions are delineated when an expression contains more than one operator. The operators have an order of precedence that is used to determine the grouping of terms. The default operator precedence can be documented or overridden via the use of grouping parentheses. Grouping is not related to order of evaluation of the individual terms. *See also* parentheses punctuator.

grouping^{C89} An `lconv` structure member that is a pointer to a string whose elements indicate the size of each group of digits in formatted nonmonetary quantities. If the string consists of `" "`, the value is not available in the current locale or is of zero length. In the `"C"` locale this member must have the value `" "`. The elements are interpreted according to the following:

`CHAR_MAX` No further grouping is to be performed.

0 The previous element is to be repeatedly used for the remainder of the digits.

other The integer value is the number of digits that constitute the current group. The next element is examined to determine the size of the next group of digits before the current group.

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