

**NAME**

`fputc`, `fputs`, `putc`, `putchar`, `puts` - output of characters and strings

**SYNOPSIS**

```
#include <stdio.h>

int fputc(int c, FILE *stream);

int fputs(const char *s, FILE *stream);

int putc(int c, FILE *stream);

int putchar(int c);

int puts(const char *s);
```

**DESCRIPTION**

`fputc()` writes the character *c*, cast to an *unsigned char*, to *stream*.

`fputs()` writes the string *s* to *stream*, without its terminating null byte (0).

`putc()` is equivalent to `fputc()` except that it may be implemented as a macro which evaluates *stream* more than once.

`putchar(c)` is equivalent to `putc(c, stdout)`.

`puts()` writes the string *s* and a trailing newline to *stdout*.

Calls to the functions described here can be mixed with each other and with calls to other output functions from the *stdio* library for the same output stream.

For nonlocking counterparts, see [unlocked\\_stdio\(3\)](#).

**RETURN VALUE**

`fputc()`, `putc()` and `putchar()` return the character written as an *unsigned char* cast to an *int* or **EOF** on error.

`puts()` and `fputs()` return a nonnegative number on success, or **EOF** on error.

**CONFORMING TO**

C89, C99.

**BUGS**

It is not advisable to mix calls to output functions from the *stdio* library with low-level calls to [write\(2\)](#) for the file descriptor associated with the same output stream; the results will be undefined and very probably not what you want.

**SEE ALSO**

[write\(2\)](#), [ferror\(3\)](#), [fgets\(3\)](#), [fopen\(3\)](#), [fputc\(3\)](#), [fputwc\(3\)](#), [fputws\(3\)](#), [fseek\(3\)](#), [fwrite\(3\)](#), [putwchar\(3\)](#), [scanf\(3\)](#), [unlocked\\_stdio\(3\)](#)

**COLOPHON**

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