

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.

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

ATTRIBUTES

For an explanation of the terms used in this section, see [attributes\(7\)](#).

Interface	Attribute	Value
fputc() , fputs() , putc() , putchar() , puts()	Thread safety	MT-Safe

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, 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\(3\)](#), [fputwc\(3\)](#), [fputws\(3\)](#), [fseek\(3\)](#), [fwrite\(3\)](#), [putwchar\(3\)](#), [scanf\(3\)](#), [unlocked_stdio\(3\)](#)

COLOPHON

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