putchar

Defined in header <stdio.h>

```
int putchar( int ch );
```

Writes a character ch to stdout. Internally, the character is converted to `unsigned char` just before being written.

Equivalent to `putc(ch, stdout)`.

Parameters

ch - character to be written

Return value

On success, returns the written character.

On failure, returns EOF and sets the *error* indicator (see `ferror()`) on stdout.

Example

putchar with error checking

Run this code

```c
#include <stdio.h>
#include <stdlib.h>

int main(void)
{
    int ret_code = 0;
    for (char c = 'a'; (ret_code != EOF) && (c != 'z'); c++)
        ret_code = putchar(c);

    /* Test whether EOF was reached. */
    if (ret_code == EOF)
       if (ferror(stdout))
       {
          fprintf(stderr,"putchar() failed in file %s at line # %d\n", __FILE__,__LINE__-6);
          perror("putchar()");
          exit(EXIT_FAILURE);
       }
    putchar('\n');

    // putchar return value is not equal to the argument
    int r = 0x1070;
    printf("\n0x%x\n", r);
    r = putchar(r);
    printf("\n0x%x\n", r);
}
```

Output:

```
abcdefghijklmnopqrstuvwxy

0x1070
p
0x70
```

References

- C11 standard (ISO/IEC 9899:2011):
    - 7.21.7.8 The putchar function (p: 333)

- C99 standard (ISO/IEC 9899:1999):

    - 7.19.7.9 The putchar function (p: 299)

- C89/C90 standard (ISO/IEC 9899:1990):

    - 4.9.7.9 The putchar function

See also

fputc **putc**	writes a character to a file stream (function)

C++ documentation for **putchar**