

The scanf Fact Sheet

Format Conversion Specifiers in scanf

Format	Name	Description
%c	Character	Reads a single character into a character variable. May be a whitespace or non-whitespace character. The destination must be a pointer to char. To read the next non-whitespace character, use %1s (i.e., a string with a width field of 1).
%d or %i	Signed integer	Specifies a decimal integer. If %i is used and the input begins with 0x or 0X, the input is interpreted as a hexadecimal integer; if the input begins with 0, the input is interpreted as an octal integer. The destination variable must be a pointer to int. Add an l prefix to the letter, to specify long int. Add an ll prefix to specify a long long int. Add an h prefix to specify short int. Add an hh prefix to specify char.
%e or %E or %f or %g or %G	Floating point value	Specifies a floating point number. The destination variable must be a pointer to float. Add an l prefix to the letter to specify double, in which case the destination must be a pointer to a double. NOTE: Unlike printf, you must specify the l prefix when working with variables of data type double.
%n	Number of characters read	Places the number of characters read so far into the integer variable whose address is specified in the associated argument. No input is consumed by this specifier.
%o	Octal integer	Specifies an integer in octal notation. The destination variable must be a pointer to int. Add an l prefix to the letter, to specify long int. Add an ll prefix to specify a long long int. Add an h prefix to specify short int. Add an hh prefix to specify char.
%s	Character string	Specifies a string of characters, up to the first whitespace character. The destination must be a pointer to the beginning of an array of characters, which has sufficient space for the input characters read and the null termination character.
%u	Unsigned decimal integer	Specifies an unsigned decimal integer. The destination must be a pointer to an unsigned int. Add an l prefix to the letter, to specify unsigned long int. Add an ll prefix to specify a unsigned long long int. Add an h prefix to specify unsigned short int. Add an hh prefix to specify an unsigned char.
%x	Hexadecimal integer	Specifies an integer in hexadecimal notation. The destination must be a pointer to an int. Add an l prefix to the letter, to specify long int. Add an ll prefix to specify a long long int. Add an h prefix to specify short int. Add an hh prefix to specify char.

The *width field* is a positive decimal integer that, if specified, must appear immediately after the %. In general, it indicates the maximum number of characters that will be read for that field, unless otherwise specified above.