

# Character Set

Like every other language, 'C' also has its own character set. A program is a set of instructions that, when executed, generate an output.

The data that is processed by a program consists of various characters and symbols. The output generated is also a combination of characters and symbols.

The characters that can be used to form words, numbers and expressions depend upon the computer on which the program is run. However, a subset of characters is available that can be used on most personal, micro mini and mainframe computers to form a standard program.

The characters in C are grouped into the following categories:

1. Letters
2. Digits
3. Special characters
4. White spaces

A compiler always ignores the use of characters, but it is widely used for formatting the data. Following is the character set in 'C' programming:

1. Letters
  - Uppercase characters (A-Z)
  - Lowercase characters (a-z)
2. Numbers
  - All the digits from 0 to 9
3. White spaces
  - Blank space
  - New line
  - Carriage return
  - Horizontal tab
4. Special characters
  - Special characters in 'C' are shown in the given table,

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, (comma)

{ (opening curly bracket)

. (period)	} (closing curly bracket)
; (semi-colon)	[ (left bracket)
: (colon)	] (right bracket)
? (question mark)	( (opening left parenthesis)
' (apostrophe)	) (closing right parenthesis)
" (double quotation mark)	& (ampersand)
! (exclamation mark)	^ (caret)
(vertical bar)	+ (addition)
/ (forward slash)	- (subtraction)
\ (backward slash)	* (multiplication)
~ (tilde)	/ (division)
_ (underscore)	> (greater than or closing angle bracket)
\$ (dollar sign)	< (less than or opening angle bracket)
% (percentage sign)	# (hash sign)

Characters	ASCII Values
A – Z	65 – 90
a – z	97 – 122
0 – 9	48 – 57
special symbols	0 - 47, 58 - 64, 91 - 96, 123 - 127