



Constants



- Constants in C are the fixed values that are used in a program, and its value remains the same during the entire execution of the program.
- Constants are also called literals.
- Constants can be any of the [data types](#).



- Constants are categorized into two basic types, and each of these types has its subtypes/categories. These are:
- Numeric Constants
 - Integer Constants
 - Real Constants
- Character Constants
 - Single Character Constants
 - String Constants
 - Backslash Character Constants



Integer Constant

It's referring to a sequence of digits. Integers are of three types :

- Decimal Integer
- Octal Integer
- Hexadecimal Integer

Example:

15, -265, 0, 99818, +25, 045, 0X6

Real Constant

The numbers containing fractional parts like 99.25 are called real or floating points constant.



Single Character Constants

- Simply contains a single character enclosed within ' and ' (a pair of single quote).
- It is to be noted that the character '8' is not the same as 8.
- Character constants have a specific set of integer values known as ASCII values

String Constants

- These are a sequence of characters enclosed in double quotes, and they may include letters, digits, special characters, and blank spaces.
- It is again to be noted that "G" and 'G' are different - because "G" represents a string as it is enclosed within a pair of double quotes whereas 'G' represents a single character.

Example:

"Hello!", "2015", "2+1"



Backslash character constant

❖ \a	beep sound
❖ \b	backspace
❖ \f	form feed
❖ \n	new line
❖ \r	carriage return
❖ \t	horizontal tab
❖ \v	vertical tab
❖ \'	single quote
❖ \"	double quote
❖ \\	backslash
❖ \0	null