

014 - C FORMAT SPECIFIERS

The Format specifier is a string used in the formatted input and output functions.

The format string determines the format of the input and output.

The format string always starts with a '%' character.

The commonly used format specifiers in printf() function are:

`%d` or `%i`

It is used to print the signed integer value where signed integer means that the variable can hold both positive and negative values.

`%u`

It is used to print the unsigned integer value where the unsigned integer means that the variable can hold only positive value.

`%o`

It is used to print the octal unsigned integer where octal integer value always starts with a 0 value.

`%x`

It is used to print the hexadecimal unsigned integer where the hexadecimal integer value always starts with a 0x value. In this, alphabetical characters are printed in small letters such as a, b, c, etc.

`%X`

It is used to print the hexadecimal unsigned integer, but `%X` prints the alphabetical characters in uppercase such as A, B, C, etc.

`%f`

It is used for printing the decimal floating-point values. By default, it prints the 6 values after '.'.

`%e/` OR `%E`

It is used for scientific notation. It is also known as Mantissa or Exponent.

`%g`

It is used to print the decimal floating-point values, and it uses the fixed precision, i.e., the value after the decimal in input would be exactly the same as the value in the output.

`%p`

It is used to print the address in a hexadecimal form.

`%c`

It is used to print the unsigned character.

`%s`

It is used to print the strings.

`%ld`

It is used to print the long-signed integer value.
