

ASSIGNMENT 03

1. **Primitive Data Types** are those data types which are also **Keywords** i.e., **int, char, float, double, void**.
2. **Declaration Statements** can be written outside the function body.
3. The size of float type variable is **4 Bytes**.
4. The value of an Uninitialized Variable is **Garbage Value**.
5. The differences between float and double are: -
 - **The size of float type variable is 4 bytes while the size of double type variable is 8 bytes.**
 - **float can store 32 bits of data whereas double can store 64 bits of data.**
 - **float is single precision data type and double is double precision data type which means it is two times precise than float.**
6. ASCII stands for **American Standard Code for Information Interchange**.
7. **Keywords** are predefined words or reserved words whose meaning is already known by the Compiler

Functions are group of statements that performs specific task. It is a block of code which has some name for identification.

8. **Modifiers** are keywords which changes the meaning of basic data type in C. It specifies the amount of memory space to be allocated for a variable. Modifiers are prefixed with basic data types to modify the memory allocated for a variable.

There are two types of type modifiers:

1. **Size modifiers** – short, long
2. **Sign modifiers** – signed, unsigned

They can be further sub-divided into these four data type modifiers:

1. **long / long long**
2. **short**
3. **signed**
4. **unsigned**

Data Type	Size (in Bytes)	Meaning
signed int	4	Used for integers (equivalent to int).
unsigned int	4	Can only store non-negative integers.
short	2	Used for small integers. Range: -32768 to 32767

long	at least 4	Used for large integers. Equivalent to long int.
unsigned long	4	Used for large positive integers or 0. Equivalent to unsigned long int.
long long	8	Used for very large integers. Equivalent to long long int.
unsigned long long	8	Used for very large positive integers or 0. Equivalent to unsigned long long int.
long double	8	Used for large floating-point numbers.
signed char	1	Used for characters. Guaranteed range -127 to 127.
unsigned char	1	Used for characters. Range 0 to 255.

9. **Yes**, we can assign a character constant in an int variable because in C language **character constants internally treated as integer constants** as they stored to their **corresponding ASCII Codes**.

10. **False.**

Function is a block of code, but every block of code is not a function. Some are Decision Control Statements or Instructions (i.e., if, if-else) and some are Iterative/Repetitive Control Instructions or Loop (i.e., for, while, do while).