**Assignment - 3 C Language LIVE Community Classes MySirG.**

**1. What are the primitive data types in C Language?**

**Answer -** int, char, double, float & void these are primitive data types in C Language.

**2. What kind of statements can be written outside the function body?**

**Answer-** we can write library’s names (#include<stdio.h>) and we can declare global variables outside of the function body.

**3. What is the size of the float type variable?**

**Answer-** size of float type variable is 4 bytes.

**4. What is the value of an uninitialized variable?**

**Answer-** Garbage value.

**5. What is the difference between float and double?**

**Answer-** Size of **Float** is 4 bytes= 32 bits and size of **Double** is 8 bytes= 64 bits, that means Binary representation of one variable in 32 binary number for example binary of 5 is - 00000000000000000000000000000101 in 32 bits if datatype selected is float and similarly 64 binary number will be written for binary of 5 example- 0000000000000000000000000000000000000000000000000000000000000101so we can say that in terms of binary representation datatype double is more accurate that float.

**6. What is the full form of ASCII?**

**Answer:** American Standard Code for Information Interchange.

**7. What is the difference between a keyword and a function?**

**Answer:** A keyword is just part of syntax for ex: int a; , here int is keyword that indicates that variable a is integer type, and it get 4 bytes in memory, vs Functions are can be written to perform specific operation, when you call the function it perform or runs code written inside function,

**8. Explore the use of type modifiers in C language:**

**Answer:** Type modifiers are used to change characteristics of Data Type,

Some of the type modifiers are as per below-

**const**- once you write **const** before **int a=10 ; ,** you cannot change value of that a variable

**volatile-** variable value can only changed by external factors.

**signed-** Variable can hold negative value also.(ex- temperature)

**unsigned-** Variable cannot hold negative valve (ex- age)

**long-** this specify the size of **int** datatype is larger

**short -** this specify the size of int datatype is short.

**\_Bool -** this modifier used to declare datatype that can hold only true or false values , here true= non zero value , false= zero

**\_Complex:** used to perform operations of complex number which are mix of Real and imaginary part for ex-

**\_Complex float a = 2.0f + 3.0fi;**

**\_Complex float b = 1.0f - 1.0fi;**

**\_Complex float result = a \* b;**

**\_Imaginary:** The \_Imaginary modifier is used to declare imaginary number variables for

ex- \_Imaginary double z = 3.0i;

**\_Atomic:**

The \_Atomic modifier is used to declare atomic data types.

**Register:** this modifier is used to suggest to the compiler to store a variable in a CPU register for faster access. However, modern compilers often ignore this suggestion as they perform optimizations automatically.

**9. Can you assign a character constant in an int variable?**

**Answer:** Yes, you can assign character constant in an int variable but it will store ASCII code for that character

**10. State the following statement as true or false -”Every block of code is a function”.**

**Answer:** Nope because we can write { } sometime for if else conditions, while /for loop,

But we can say that Every block of code is function when ‘ () ‘ used before blocks.