**A simple c program**

**Program to Display "Hello, World!"**

#include<stdio.h>

int main()

 {

 printf("Hello, World!");

 return 0;

}

**Output**

Hello, World!

* The #include is a **preprocessor** command that tells the compiler to include the contents of **stdio.h (standard input and output)** file in the program.
* The **stdio.h** file contains functions such as **scanf() and printf()** to take input and display output respectively.
* If you use the **printf()** function without writing **#include <stdio.h>,** the program will not compile.
* The execution of a C program starts from the main() function.
* **printf()** is a library function to send formatted output to the screen. In this program, **printf()** displays Hello, World! text on the screen.
* The **return 0;** statement is the **"Exit status"** of the program. In simple terms, the program ends with this statement.

**Note:**

First line is **pre-processor Directive**.We know that natural languages like Assamese,English etc have their own dictionary/library.Thus C has its library and it consists of some pre-written,known as **header** **files**.Here in this program,the header file namely **‘stdio.h’** is included as it the basic header file that needs to be included fora simple C program.The extension of a header file in C is’**.h**’.The header file,**stdio.h** contains the basic input/output functions and other items those are important for a simple C program.The **main() function** is necessary for each and every C program as when we execute a C program,the execution starts from **main().**

**Program to Add Two Integers**

#include <stdio.h>

int main()

 {

 int number1, number2, sum;

 printf("Enter two integers: ");

 scanf("%d %d", &number1, &number2);

 // calculating sum

 sum = number1 + number2;

 printf("%d + %d = %d", number1, number2, sum);

 return 0;

}

**Output**

Enter two integers: 12

11

12 + 11 = 23

In this program, the user is asked to enter two integers. These two integers are stored in variables number1 and number2 respectively.

printf("Enter two integers: ");

scanf("%d %d", &number1, &number2);

Then, these two numbers are added using the + operator, and the result is stored in the sum variable.

sum = number1 + number2;



Finally, the **printf()** function is used to display the sum of numbers.

**Note:**

**printf()** is used to display text onto the screen

**&**is used to assign the input value to the variable and store it at that particular location.

**scanf()** is used to take input from the user using format specifier.