

ASSIGNMENT # 03

Fall – 2025

Submitted To

Sir Tasaddaq Latif

Lecturer

Submitted By

Ayesha Ahsan (25017119-044)

Course code: (CS-102)



Department of Computer Science

Faculty of Computing and Information Technology

University of Gujrat, Hafiz Hayat Campus

QUESTION # 01: Find the errors in the following codes. If no error then write the output.

(a)No error (Output is end of the program)

(b)Error (The brackets are not apply in if else statement)

(c) $a+b =res$ (This is wrong because the compiler consider the $a+b$ as whole variable.)

(d)Output (12,22)

QUESTION # 02: Define the following terms:

a- Header Files

Header files are collections of standard library functions and objects to perform different tasks. C++ provides many header files for different purposes. Each header file contains different types of predefined functions and objects. Many header files can be included in one program. The extension of a header file is **.h**. The header files are normally stored in **INCLUDE** subdirectory. The name of header file is written in angle brackets.

EXAMPLE:

```
#include<iostream.h>
```

b- Source code

A program written in a high- level language is called source code. Source code is also called source program. Computer cannot understand the statements of high- level language. The source code cannot be executed by computer directly. It must be converted into object code and then executed.

c- Comments

Comments are the lines of program that are not executed. The compiler ignores comments and does not include them in the executable program. That is why the comments do not affect the size of executable program. They are notes about different lines of the code to explain the

purpose of the code. Different type of comments are single-line comments and Multi-line comments.

QUESTION # 03: Write a program that read height in inches. And display the height in feet and inches.

```
#include<iostream>
Using namespace std;
int main()
{
    int total inches, feet, inches;
    cout<<"Enter height in inches";
    cin>>total inches;
    feet = total inches / 12;
    inches = total inches % 12;
    cout<<"Height"<<feet<<"feet"<<inches<<"inches"<<endl;
    return 0;
}
```

QUESTION # 04: Write a program that takes two numbers from user. Find if the first number is multiple of second number or not.

```
#include<iostream>
using namespace std;
int main()
{
    int a, b;
    cout<<"Enter first number:";
    cin>>a;
    cout<<"Enter second number:";
    cin>>b;
    if(a % b==0)
        cout<<"First number is the multiple of second:";
    else
        cout<<"Not a multiple:";
    return 0;
}
```

QUESTION # 05: Read 10 numbers and display sum, maximum, and minimum number.

```
#include<iostream>
using namespace std;
int main ()
{
    int i, n , min, max, sum = 0;
    min = 9;
    max = 0;
    for(i = 1; i<=10 ; i++)
    {
        cout<<"Enter number:";
        cin>>n;
        sum= sum+n;
        if(max<n)
            max=n;
        if(min>n)
            min=n;
    }
    cout<<"Sum = "<<sum<<endl;
    cout<<"Maximum = "<<max<<endl;
    cout<<"Minimum = "<<min<<endl;
    return 0;
}
```

QUESTION # 06

Read 10 numbers from the user and store them in an array and print them in ascending order using a function.

```
#include<iostream>
using namespace std;
void insert ();
void sortArr ();
void show ();
const int n=5;
int arr[n],i, temp,j;
int main(){
    Insert ();
    sortArr ();
    show ();
```

```
return 0;
}
Void insert ()
{
cout<<"enter"<<n<<"value";
for(i=0;i<n;i++)
cin>>arr[i];
}
Void sortArr ()
{
for(j=1;j<=5;j++)
{
for(i=0;i<n-1;i++)
if(arr[i]>arr[i+1])
{
temp=arr[i];
arr[i]=arr[i+1];
arr[i+1]=temp;
}
}
}
Void show ()
{
cout<<"sorting array";
for(i=0;i<n;i++)
cout<<arr[i]<<" ";
}
```