**Assignment – 23 A Job Ready Bootcamp in C++, DSA and IOT MySirG**

# Basics of C++

1. Write a C++ program to print **Hello MySirG** on the screen.

#include <iostream>

using *namespace* std;

*int* main()

{

    cout << "MySirG";

    return 0;

}

2. Write a C++ program to print **Hello** on the first line and **MySirG** on the second line

using endl.

#include <iostream>

using *namespace* std;

*int* main()

{

    cout << "Hello" << endl

         << "MySirG";

    return 0;

}

3. Write a C++ program to calculate the sum of two numbers.

#include <iostream>

using *namespace* std;

*int* main()

{

*int* a = 20, b = 10, sum;

    sum = a + b;

    cout << "%d", sum;

    return 0;

}

4. Write a C++ program to calculate the area of a circle

#include <iostream>

using *namespace* std;

*int* main()

{

*float* r, area;

    cout << "Enter the radius : ";

    cin >> r;

    area = 3.14 \* r \* r;

    cout << "Area of circle with radius " << r << " is : " << area;

    return 0;

}

5. Write a C++ program to calculate the volume of a cuboid.

#include <iostream>

using *namespace* std;

*int* main()

{

*float* l, b, h, vol;

    cout << "Enter the Lenght of cuboid : ";

    cin >> l;

    cout << "Enter the Breadth of cuboid : ";

    cin >> b;

    cout << "Enter the Height of cuboid : ";

    cin >> h;

    vol = l \* b \* h;

    cout << "Volume = " << vol << " unit";

    return 0;

}

6. Write a C++ program to calculate an average of 3 numbers.

#include <iostream>

using *namespace* std;

*int* main()

{

*float* a, b, c, avg;

    cout << "Enter three numbers: ";

    cin >> a >> b >> c;

    avg = (a + b + c) / 3;

    cout << "Average of three number = " << avg;

    return 0;

}

7. Write a C++ program to calculate the square of a number

#include <iostream>

using *namespace* std;

*int* main()

{

*int* num, sqr;

    cout << "Enter a number : ";

    cin >> num;

    sqr = num \* num;

    cout << "Square of " << num << " is " << sqr;

    return 0;

}

8. Write a C++ program to swap values of two int variables without using third variable

#include <iostream>

using *namespace* std;

*int* main()

{

*int* a, b;

    cout << "Enter a = ";

    cin >> a;

    cout << "Enter b = ";

    cin >> b;

    cout << endl;

    cout << "Before swap a= " << a << " b= " << b << endl;

    a = a + b;

    b = a - b;

    a = a - b;

    cout << "After swap a= " << a << " b= " << b << endl;

    return 0;

}

9. Write a C++ program to find the maximum of two numbers.

#include <iostream>

using *namespace* std;

*int* main()

{

*int* num1, num2;

    cout << "Enter the 1st number : ";

    cin >> num1;

    cout << "Enter the 2nd number : ";

    cin >> num2;

    if (num1 > num2)

    {

        cout << num1 << " is maximum.";

    }

    else

    {

        cout << num2 << " is maximum.";

    }

    return 0;

}

10. Write a C++ program to add all the numbers of an array of size 10.

#include <iostream>

using *namespace* std;

*int* main()

{

*int* arr[10], i, sum = 0;

    cout << "Enter any ten numbers : ";

    for (i = 0; i < 10; i++)

    {

        cin >> arr[i];

        sum = sum + arr[i];

    }

    cout << "SUM of total numbers is : " << sum;

    return 0;

}