

## LAB TASK #2

Q1 Write a program that takes temperature in Fahrenheit from the user and converts it into Celsius using the formula:  $c = 5/9 (F - 32)$

Solution:

```
#include <iostream>

using namespace std;

int main()
{
    cout << "Muhammad Salman/nSAP Id: 72373" << endl;

    int F, C;

    cout << "Enter temperature in Fahrenheit: " << endl;;

    cin >> F;

    C = (5 / 9) * (F - 32);

    cout << "Temperature in Celsius:\n" << C << endl;

    return 0;
}
```



Microsoft Visual Studio Debug Console



Muhammad Salman\nSAP Id: 72373

Enter temperature in Fahrenheit:

1

Temperature in Celsius:

0

Q2 Write a program that calculates the volume of a cube by taking its measurements (length, width, and height) from the user. Formula :  $V = \text{length} * \text{width} * \text{height}$

Solution:

```
#include <iostream>

using namespace std;

int main()
{
    cout << "Muhammad Salman\nSAP Id: 72373" << endl;

    int length, width, height, volume;

    cout << "Enter length:\n ";
    cin >> length;

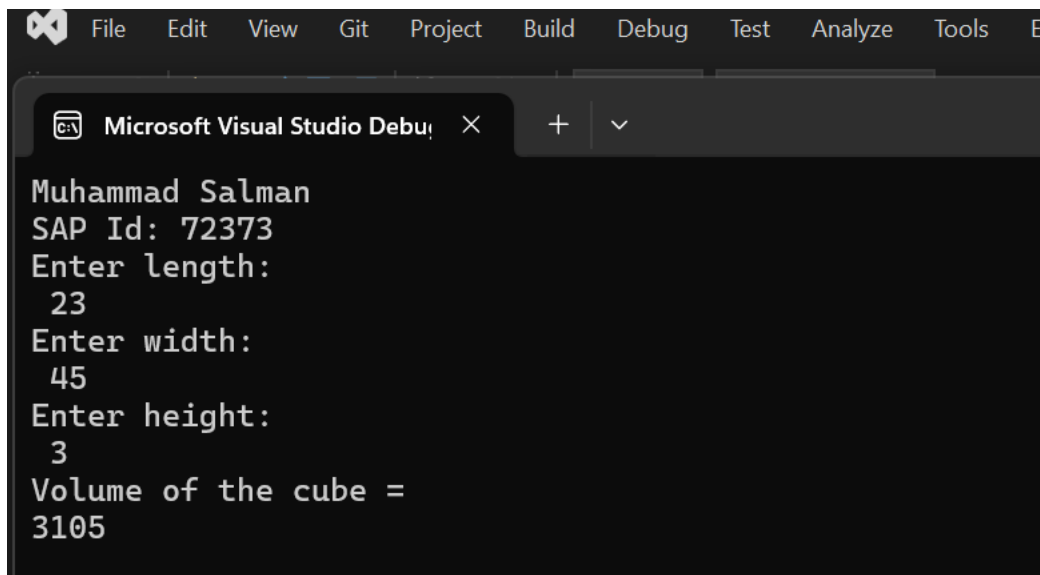
    cout << "Enter width:\n ";
    cin >> width;

    cout << "Enter height:\n ";
    cin >> height;

    volume = length * width * height;

    cout << "Volume of the cube = \n" << volume << endl;

    return 0;
}
```



The image shows a screenshot of the Microsoft Visual Studio Debug Console. The window title is "Microsoft Visual Studio Debug Console". The output text is as follows:

```
Muhammad Salman  
SAP Id: 72373  
Enter length:  
23  
Enter width:  
45  
Enter height:  
3  
Volume of the cube =  
3105
```

Q3: Write a program that takes marks obtained by a student in five subjects and calculates the total marks and percentage.

Solution:

```
#include<iostream>

using namespace std;

int main()
{
    cout << "Muhammad Salman\nSAP Id:72373" << endl;
    int DS, ICT, PF, ENG, ISL,obt,per;
    cout << "Enter your Discrete Structure marks" << endl;
    cin >> DS;
    cout << "Enter your ICT marks" << endl;
    cin >> ICT;
    cout << "Enter your Programming Fundamentals marks" << endl;
    cin >> PF;
    cout << "Enter your ENG marks" << endl;
    cin >> ENG;
    cout << "Enter your ISL marks" << endl;
    cin >> ISL;
    obt = DS + ICT + PF + ENG + ISL;
    cout << "Your obtained marks is:\n" << obt << endl;
    per = obt * 100 / 500;
    cout << "Your percentage is:\n" << per << endl;
    return 0;
}
```



Microsoft Visual Studio Debug Console



Muhammad Salman

SAP Id:72373

Enter your Discrete Structure marks

85

Enter your ICT marks

92

Enter your Programming Fundamentals marks

90

Enter your ENG marks

86

Enter your Isl marks

94

Your obtained marks is:

447

Your percentage is:

89