

LAB Task #1

Q # 1: Write a program that inputs age in years and displays age in months and days.

Solution:

```
#include <iostream>
using namespace std;
int main()
{
    cout << "Muhammad Salman\nSAP Id:72373" << endl;
    int age,months,days;
    cout << "Enter your age in years:" << endl;
    cin >> age;
    months = age * 12;
    cout << "Your age in months is:\n" << months << endl;
    days = age * 365;
    cout << "Your age in days is:\n" << days << endl;
    return 0;
}
```



The screenshot shows a terminal window titled 'Microsoft Visual Studio Debug'. The output of the program is displayed, starting with the developer's information ('Muhammad Salman' and 'SAP Id:72373'). It then prompts the user to enter their age in years ('Enter your age in years:'), which is input as '20'. Following this, it outputs the equivalent age in months ('Your age in months is:'), showing '240'. Finally, it outputs the equivalent age in days ('Your age in days is:'), showing '7300'.

```
Muhammad Salman
SAP Id:72373
Enter your age in years:
20
Your age in months is:
240
Your age in days is:
7300
```

Q # 2: Write a program that inputs 4 numbers and calculates the sum, average, and product of all the numbers.

Solution:

```
#include<iostream>
using namespace std;
int main()
{
    cout << "Muhammmad Salman\nSAP Id:72373" << endl;
    int a, b, c, d,sum,multiply,average;
    cout << "enter your first number " << endl;
    cin >> a;
    cout << "enter your second number " << endl;
    cin >> b;
    cout << "enter your third number " << endl;
    cin >> c;
    cout << "enter your fourth number " << endl;
    cin >> d;
    sum = a + b + c + d;
    cout << "the sum of four numbers is:\n" << sum << endl;
    multiply = a * b * c * d;
    cout << "the product of four numbers is:\n" << multiply << endl;
    average = sum / 4;
    cout << "the average of four numbers is:\n" << average << endl;
    return 0;
}
```

Microsoft Visual Studio Debug X + | v

Muhammmad Salman
SAP Id:72373
enter your first number
2
enter your second number
3
enter your third number
4
enter your fourth number
5
the sum of four numbers is:
14
the product of four numbers is:
120
the average of four numbers is:
3

Q # 3: Write a program that inputs miles from the user and convert miles into kilometres. One mile is equal to 1.069 kilometer.

Solution:

```
#include<iostream>

using namespace std;

int main()

{

    cout << "Muhammad Salman\nSAP Id:72373" << endl;

    int miles, km;

    cout << "Enter miles" << endl;

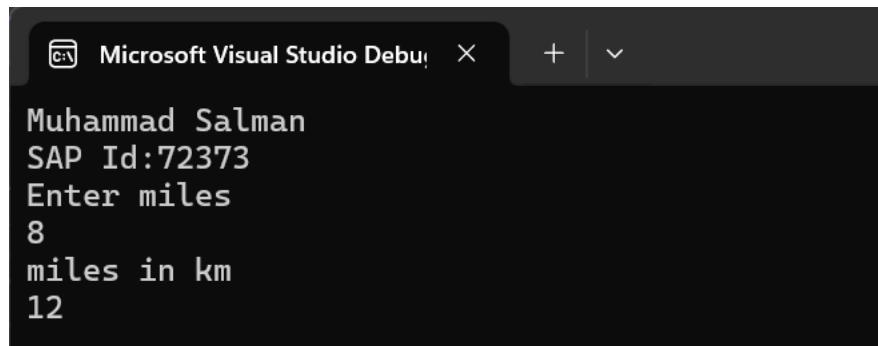
    cin >> miles;

    miles = miles * 1.609;

    cout << "miles in km\n" << miles << endl;

    return 0;

}
```



A screenshot of a Microsoft Visual Studio Debug window. The title bar says "Microsoft Visual Studio Debug". The window contains the following text:

```
Muhammad Salman
SAP Id:72373
Enter miles
8
miles in km
12
```

Q # 4: Write a program that inputs total number of students in a class and fee per student. It displays total fee collected from the class.

Solution:

```
#include <iostream>
using namespace std;

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

    cout << "Enter total number of students: ";
    cin >> students;

    cout << "Enter fee per student: ";
    cin >> feeperstudent;

    totalfee = students * feeperstudent;

    cout << "Total fee collected from the class = " << totalfee << endl;

    return 0;
}
```

ctrl+alt+I

Microsoft Visual Studio Debug X + | v

Muhammad Salman

SAP Id:72373

Enter total number of students: 60

Enter fee per student: 500

Total fee collected from the class = 30000