

## Lab Task # 7

**Q1: Write a program to store integer salaries of 6 employees in the form of array. Get input from user and display on the screen with / without loop/**

**Solution:**

```
#include<iostream>

using namespace std;

int main()
{
    int salaries[6];

    cout << "Without Loop\n";

    cout << "Enter salaries of 6 employess:\n";

    cin >> salaries[0];
    cin >> salaries[1];
    cin >> salaries[2];
    cin >> salaries[3];
    cin >> salaries[4];
    cin >> salaries[5];

    cout << "First person salary is:" << salaries[0] << endl;
    cout << "Second person salary is:" << salaries[1] << endl;
    cout << "Third person salary is:" << salaries[2] << endl;
    cout << "Fourth person salary is:" << salaries[3] << endl;
    cout << "Fifth person salary is:" << salaries[4] << endl;
    cout << "Sixth person salary is:" << salaries[5] << endl;

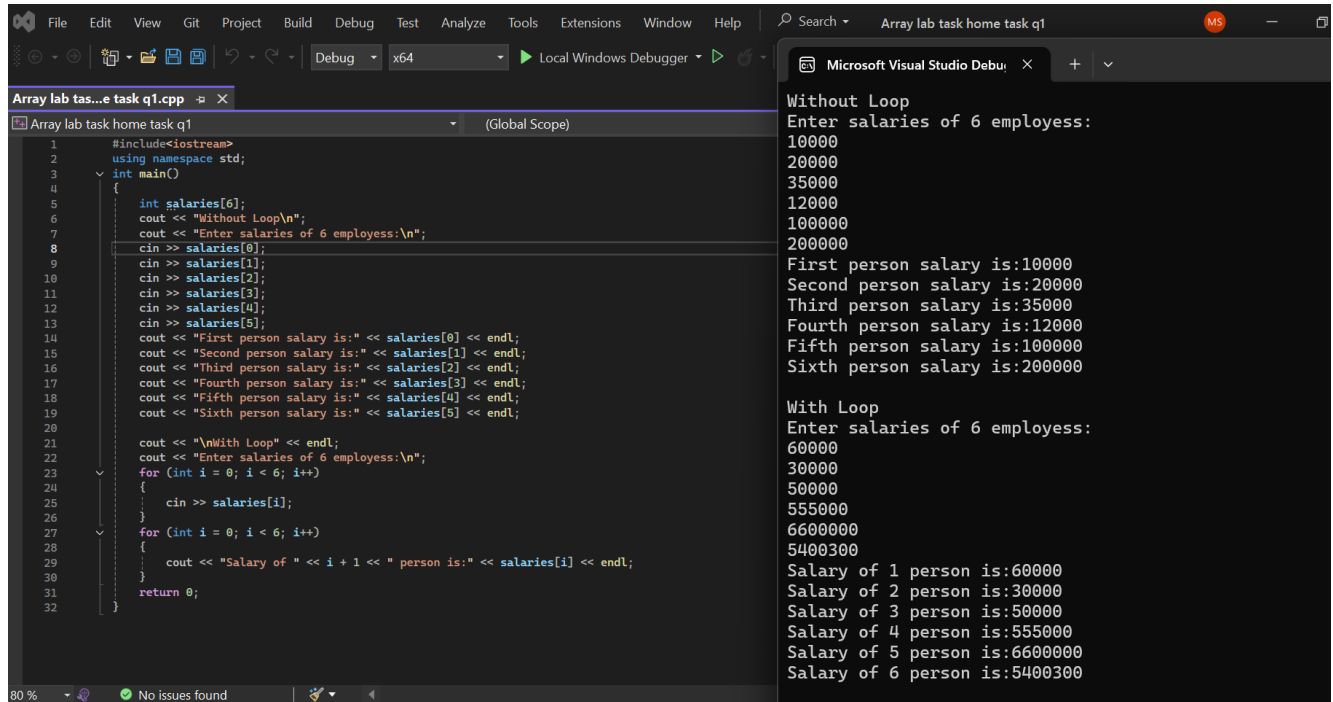
    cout << "\nWith Loop" << endl;

    cout << "Enter salaries of 6 employess:\n";

    for (int i = 0; i < 6; i++)
    {
        cin >> salaries[i];
    }

    for (int i = 0; i < 6; i++)
    {
        cout << "Salary of " << i + 1 << " person is:" << salaries[i] << endl;
    }

    return 0;
}
```



The screenshot shows the Microsoft Visual Studio IDE with a C++ file named "Array lab task home task q1.cpp". The code is being debugged, and the output window displays the results of the program execution.

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int salaries[6];
6     cout << "Without Loop\n";
7     cout << "Enter salaries of 6 employess:\n";
8     cin >> salaries[0];
9     cin >> salaries[1];
10    cin >> salaries[2];
11    cin >> salaries[3];
12    cin >> salaries[4];
13    cin >> salaries[5];
14    cout << "First person salary is:" << salaries[0] << endl;
15    cout << "Second person salary is:" << salaries[1] << endl;
16    cout << "Third person salary is:" << salaries[2] << endl;
17    cout << "Fourth person salary is:" << salaries[3] << endl;
18    cout << "Fifth person salary is:" << salaries[4] << endl;
19    cout << "Sixth person salary is:" << salaries[5] << endl;
20
21    cout << "\nWith Loop" << endl;
22    cout << "Enter salaries of 6 employess:\n";
23    for (int i = 0; i < 6; i++)
24    {
25        cin >> salaries[i];
26    }
27    for (int i = 0; i < 6; i++)
28    {
29        cout << "Salary of " << i + 1 << " person is:" << salaries[i] << endl;
30    }
31    return 0;
32 }
```

**Without Loop**  
Enter salaries of 6 employess:  
10000  
20000  
35000  
12000  
100000  
200000  
First person salary is:10000  
Second person salary is:20000  
Third person salary is:35000  
Fourth person salary is:12000  
Fifth person salary is:100000  
Sixth person salary is:200000

**With Loop**  
Enter salaries of 6 employess:  
60000  
30000  
50000  
555000  
6600000  
5400300  
Salary of 1 person is:60000  
Salary of 2 person is:30000  
Salary of 3 person is:50000  
Salary of 4 person is:555000  
Salary of 5 person is:6600000  
Salary of 6 person is:5400300

**Q2: Write a C++ program that takes quiz marks of ten students into an array, calculates their total using a loop, finds the average, and displays the result.**

Solution:

```
#include<iostream>

using namespace std;

int main()
{
    int quiz[10];
    float sum=0, avg;
    cout << "Enter quiz marks of 10 students:\n";
    for (int i = 0; i < 10; i++)
    {
        cin >> quiz[i];
    }
    cout << "Average of 10 students quiz marks is:\n";
    for (int i = 0; i < 10; i++)
    {
        sum += quiz[i];
    }
    avg = sum / 10;
    cout << avg;
}
```

The screenshot displays the Visual Studio IDE with a C++ file named 'Array lab task home task q2.cpp'. The code defines a function `main()` that prompts the user to enter quiz marks for 10 students, calculates the average, and prints the result. The code is as follows:

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int quiz[10];
6     float sum=0, avg;
7     cout << "Enter quiz marks of 10 students:\n";
8     for (int i = 0; i < 10; i++)
9     {
10         cin >> quiz[i];
11     }
12     cout << "Average of 10 students quiz marks is:\n";
13     for (int i = 0; i < 10; i++)
14     {
15         sum += quiz[i];
16     }
17     avg = sum / 10;
18     cout << avg;
19 }
20
```

The output window on the right shows the program's execution. It prompts for 10 quiz marks, which are entered as 10, 11, 10, 9, 8, 4, 10, 13, 7, and 9. The calculated average is 9.1. The output also includes a message indicating that the program has exited and a prompt to press any key to close the window.

```
Enter quiz marks of 10 students:
10
11
10
9
8
4
10
13
7
9
Average of 10 students quiz marks is:
9.1
D:\BS Artificial Intelligence\SEMESTER 1\PROGRAMMING FUNDAMENTALS LAB\q2\Debug\Array lab task home task q2.exe (process 20040) exited
To automatically close the console when debugging stops, enable Tools
le when debugging stops.
Press any key to close this window . . .
```