

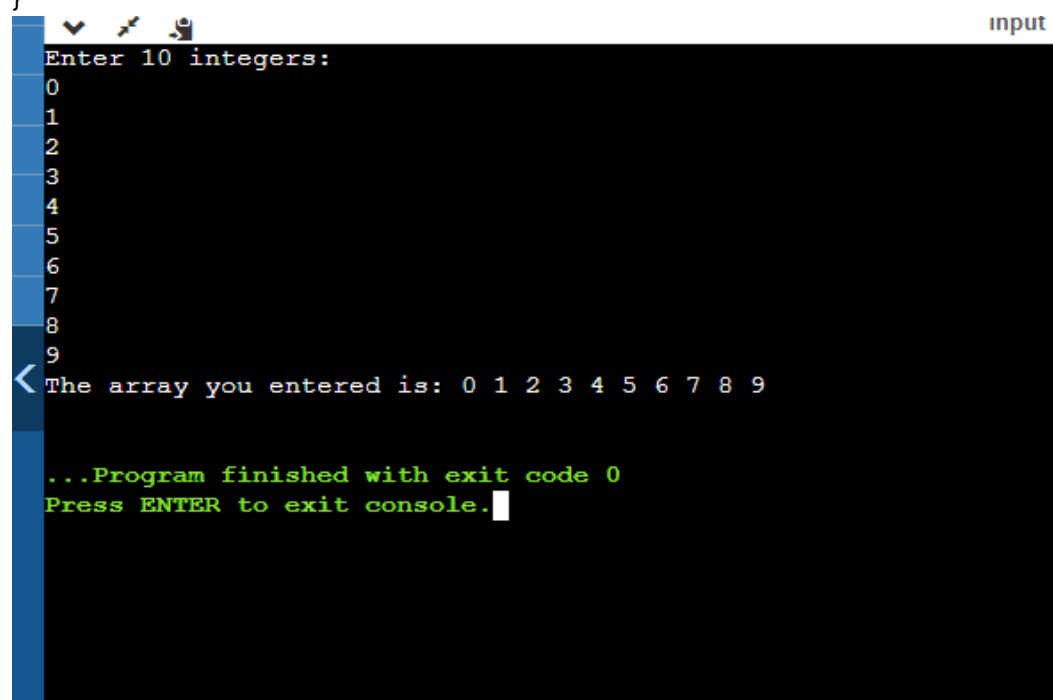
Name:Areeb Ur Rehman.  
CMS ID:463157.

## LAB TASK 7

### Task 1

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

```
int main() {
    int arr[10];
    cout << "Enter 10 integers:" << endl;
    for (int i = 0; i < 10; i++) {
        cin >> arr[i];
    }
    cout << "The array you entered is: ";
    for (int i = 0; i < 10; i++) {
        cout << arr[i] << " ";
    }
    cout << endl;
    return 0;
}
```



The screenshot shows a console window with a dark background. At the top right, the word "input" is visible. The program's output is as follows:

```
Enter 10 integers:
0
1
2
3
4
5
6
7
8
9
< The array you entered is: 0 1 2 3 4 5 6 7 8 9

...Program finished with exit code 0
Press ENTER to exit console.
```

## Task 2

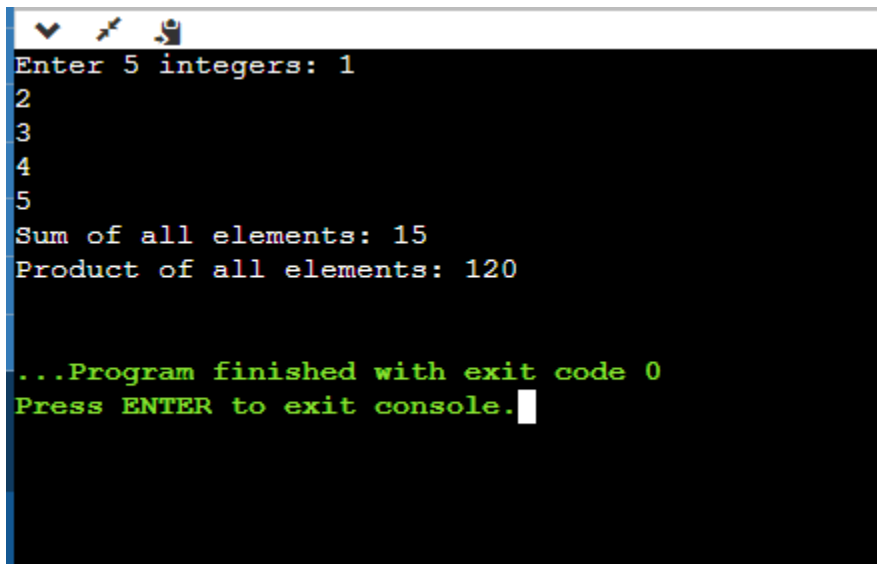
```
#include <iostream>
using namespace std;

int main() {
    int arr[5];
    int sum = 0, product = 1;

    cout << "Enter 5 integers: ";
    for (int i = 0; i < 5; ++i) {
        cin >> arr[i];
        sum += arr[i];
        product *= arr[i];
    }

    cout << "Sum of all elements: " << sum << endl;
    cout << "Product of all elements: " << product << endl;

    return 0;
}
```

A screenshot of a console window showing the execution of the C++ program from Task 2. The window has a dark background with light-colored text. The output shows the user entering five integers (1, 2, 3, 4, 5) in response to the prompt "Enter 5 integers: ". After the input, the program outputs "Sum of all elements: 15" and "Product of all elements: 120". At the bottom, a green message states "...Program finished with exit code 0" and "Press ENTER to exit console." with a white cursor box at the end of the line.

```
Enter 5 integers: 1
2
3
4
5
Sum of all elements: 15
Product of all elements: 120

...Program finished with exit code 0
Press ENTER to exit console.
```

## Task 3

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

```
int main()
```

```

{
    int n, i, j, space = 1;
    cout << "Enter the number of rows: ";
    cin >> n;
    space = n - 1;
    for (j = 1; j <= n; j++)
    {
        for (i = 1; i <= space; i++)
            cout << " ";
        space--;
        for (i = 1; i <= 2 * j - 1; i++)
            cout << "*";
        cout << endl;
    }
    space = 1;
    for (j = 1; j <= n - 1; j++)
    {
        for (i = 1; i <= space; i++)
            cout << " ";
        space++;
        for (i = 1; i <= 2 * (n - j) - 1; i++)
            cout << "*";
        cout << endl;
    }
    return 0;
}

```

[illegible]

```
Press ENTER to exit console.
```