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LAB TASK 7
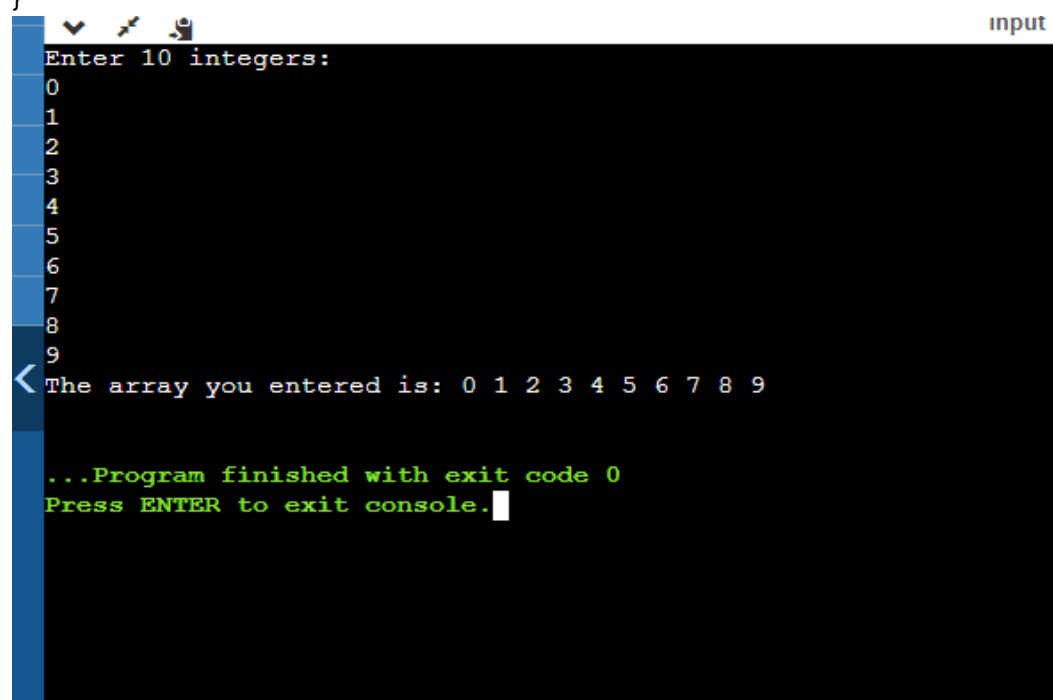
Task 1

```cpp
#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;
}
```

```
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

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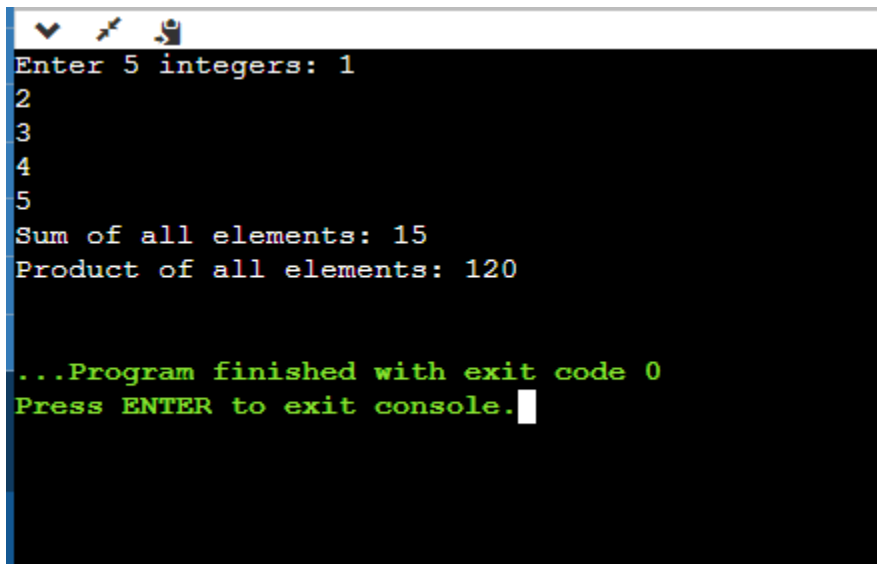
```
Enter 5 integers: 1
2
3
4
5
Sum of all elements: 15
Product of all elements: 120


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

Task 3

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

int main()
```

```cpp
{
    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;
}
```

```
Enter the number of rows: 9
         *
        * * *
       * * * * *
      * * * * * * *
     * * * * * * * * *
    * * * * * * * * * * *
   * * * * * * * * * * * * *
  * * * * * * * * * * * * * * *
 * * * * * * * * * * * * * * * * *
  * * * * * * * * * * * * * * *
   * * * * * * * * * * * * *
    * * * * * * * * * * *
     * * * * * * * * *
      * * * * * * *
       * * * * *
        * * *
         *


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