

```

#include <iostream>
using namespace std;
int main()
{
    int *a, flag, i;
    int n;
    cout << "Enter the no. of elements you want to put in array :" << endl;
    cin >> n;
    a = new int[n];
    for (int k = 0; k < n; k++)
    {
        cout << "Enter the " << k + 1 << " element of array :" << endl;
        cin >> a[k];
    }

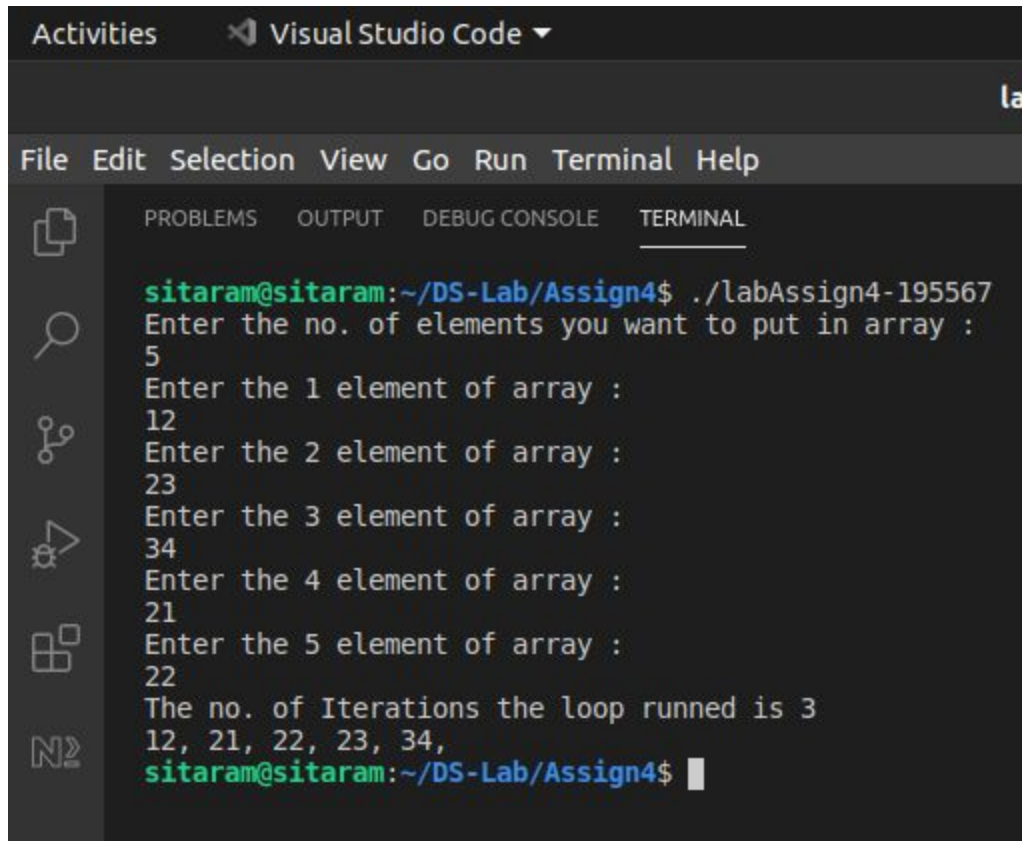
    //Bubble Sort Algorithm
    int end = n - 1;
    for (i = 1; i <= n - 1; i++)
    {
        flag = 0;
        for (int j = 0; j <= end - i; j++)
        {
            if (a[j] > a[j + 1])
            {
                swap(a[j], a[j + 1]);
                flag = 1;
            }
        }
        if (flag == 0)
        {
            break;
        }
    }

    cout << "The no. of Iterations the loop runned is " << i << endl;
    for (i = 0; i < n; i++)
    {
        cout << a[i] << ", ";
    }
    delete[] a;
}

```

```
return 0;  
}
```

BELOW IS THE IMAGES OF THE OUTPUT OF THE PROGRAM

A screenshot of the Visual Studio Code interface. The top bar shows 'Activities' and 'Visual Studio Code'. The menu bar includes 'File', 'Edit', 'Selection', 'View', 'Go', 'Run', 'Terminal', and 'Help'. The left sidebar has icons for Explorer, Search, Source Control, Run and Debug, Extensions, and Testing. The main area shows the 'TERMINAL' tab with the following output:

```
sitaram@sitaram:~/DS-Lab/Assign4$ ./labAssign4-195567  
Enter the no. of elements you want to put in array :  
5  
Enter the 1 element of array :  
12  
Enter the 2 element of array :  
23  
Enter the 3 element of array :  
34  
Enter the 4 element of array :  
21  
Enter the 5 element of array :  
22  
The no. of Iterations the loop runned is 3  
12, 21, 22, 23, 34,  
sitaram@sitaram:~/DS-Lab/Assign4$
```