



**Submitted by:**

Burhan Baig

**Referred to:**

Sir. Muhammad Affan

**Roll no:**

460945

# **Fundamentals of Programming**

Lab Task 7

## Task 1

```
#include <iostream>

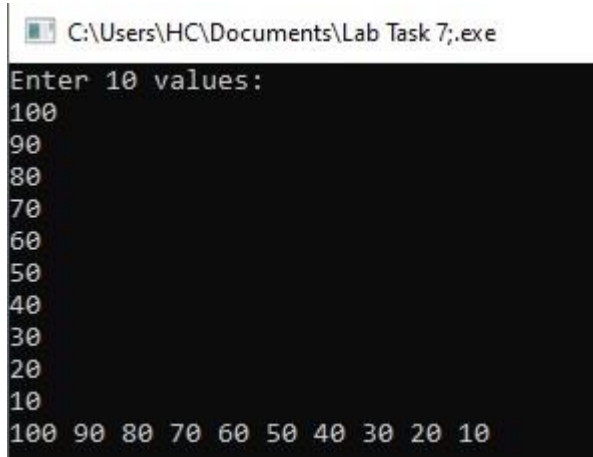
using namespace std;

int main () {
    int bar [10] = {};
    cout<<"Enter 10 values: "<<endl;
    for (int i=0;i<10;i++) {

        cout;
        cin>>bar[i];
    }
    for (int j=0;j<10;j++) {

        cout<<bar[j]<<" ";

    }
    return 0;
}
```



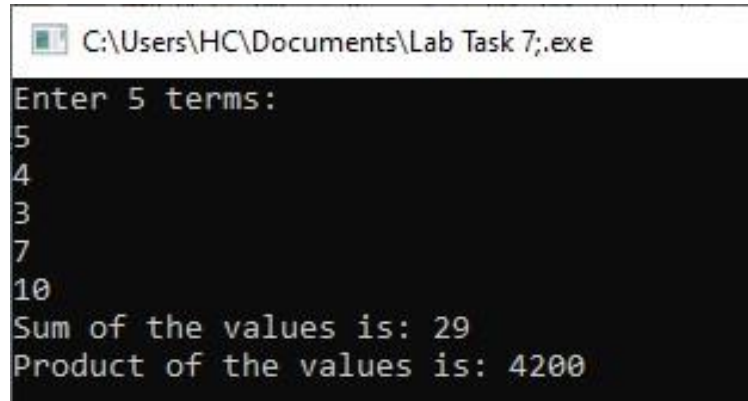
```
C:\Users\HC\Documents\Lab Task 7;.exe
Enter 10 values:
100
90
80
70
60
50
40
30
20
10
100 90 80 70 60 50 40 30 20 10
```

## Task 2

```
#include <iostream>
using namespace std;
int main () {
    int sum[5];
    int su,pro;
    cout<<"Enter 5 terms: "<<endl;
    for (int i=0;i<5;i++) {
        cout;
        cin>>sum[i];

        su+=sum[i];
        pro*=sum[i];

    }
    cout<<"Sum of the values is: "<<su<<endl;
    cout<<"Product of the values is: "<<pro;
    return 0;
}
```



```
C:\Users\HC\Documents\Lab Task 7;.exe
Enter 5 terms:
5
4
3
7
10
Sum of the values is: 29
Product of the values is: 4200
```

## Task 3

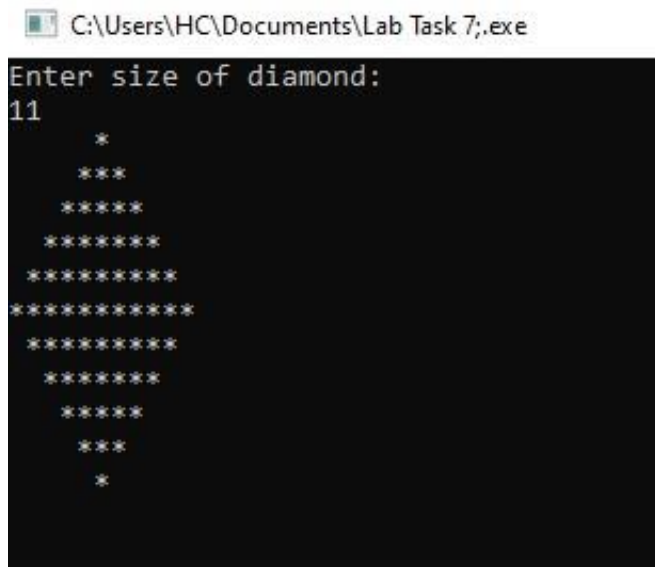
```
#include <iostream>

using namespace std;

int size;

cout<<"Enter size of diamond: "<<endl; cin>>size;
int half=size/2;
char shape[size];
for (int i=0;i<=size-1;i++) {
    shape[i]=' ';
}
for (int i=0; i<=half; i++) {
for (int j=0; j<=size;j++) {
    shape[half-i]='*';
    shape[half+i]='*';
    cout<<shape[j];
}
cout<<endl;
}
for (int i=half;i>=0;i--) {
    for (int j=0;j<size;j++) {
        shape[half-i]=' ';
        shape[half+i]=' ';
        cout<<shape[j];
    }
    cout<<endl;
}

return 0;
}
```



```
C:\Users\HC\Documents\Lab Task 7;.exe
Enter size of diamond:
11
      *
     ***
    *****
   *********
  ***********
 *****
*****
  *****
   *****
    ***
     *
```