

Fundamentals of Programming

Lab Task: 7

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Section: B

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Task:1

Code:

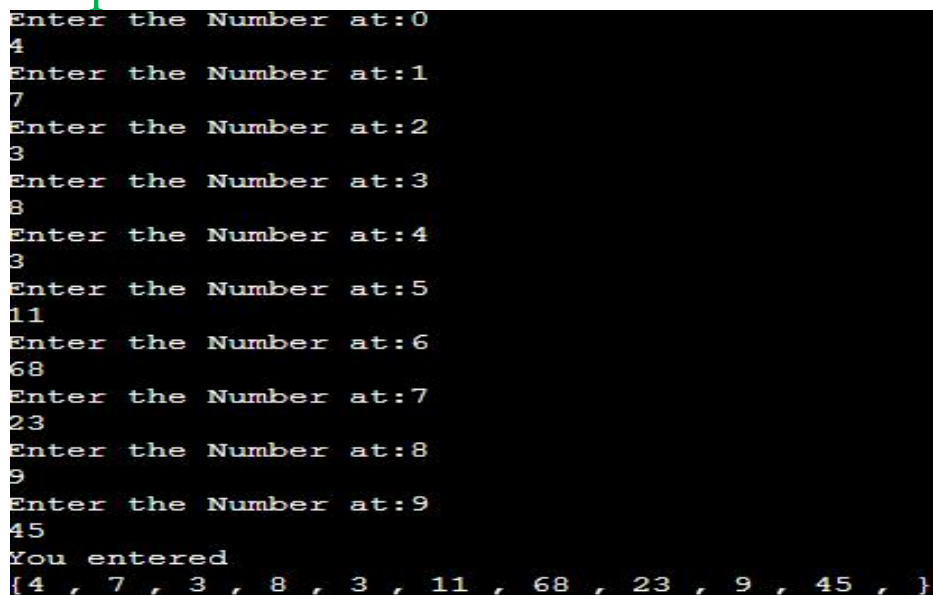
```
#include <iostream>
using namespace std;

int main(){
    int array[10];

    for(int i=0;i<10;i++){
        cout<<"Enter the Number at:"<<i<<endl;
        cin>>array[i] ;
        continue;
    }
    cout<<"You entered\n{";
    for(int j=0;j<10;j++){
        cout<<array[j]<<" , ";
    }
    cout<<"}";

    return 0;
}
```

Output:



```
Enter the Number at:0
4
Enter the Number at:1
7
Enter the Number at:2
3
Enter the Number at:3
8
Enter the Number at:4
3
Enter the Number at:5
11
Enter the Number at:6
68
Enter the Number at:7
23
Enter the Number at:8
9
Enter the Number at:9
45
You entered
{4 , 7 , 3 , 8 , 3 , 11 , 68 , 23 , 9 , 45 , }
```

Task: 2

Code:

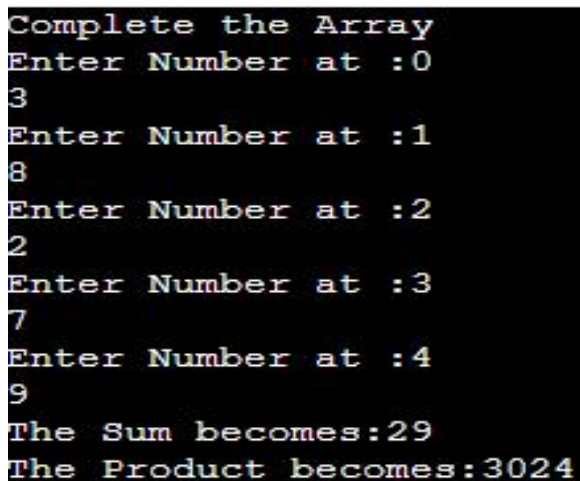
```
#include <iostream>
using namespace std;

int main(){
    int array[5];
    int sum=0,product=1;
    cout<<"Complete the Array"<<endl;
    for(int i=0;i<5;i++){
        cout<<"Enter Number at : "<<i<<endl;
        cin>>array[i];
    }
    cout<<"The Sum becomes:";
    for(int i=0;i<5;i++){
        sum +=array[i];
    }cout<<sum<<endl;

    cout<<"The Product becomes:";
    for(int i=0;i<5;i++){
        product *=array[i];
    }cout<<product<<endl;

    return 0;
}
```

Output:

A screenshot of a terminal window showing the output of the C++ program. The text is as follows:

```
Complete the Array
Enter Number at :0
3
Enter Number at :1
8
Enter Number at :2
2
Enter Number at :3
7
Enter Number at :4
9
The Sum becomes:29
The Product becomes:3024
```

Task: 3

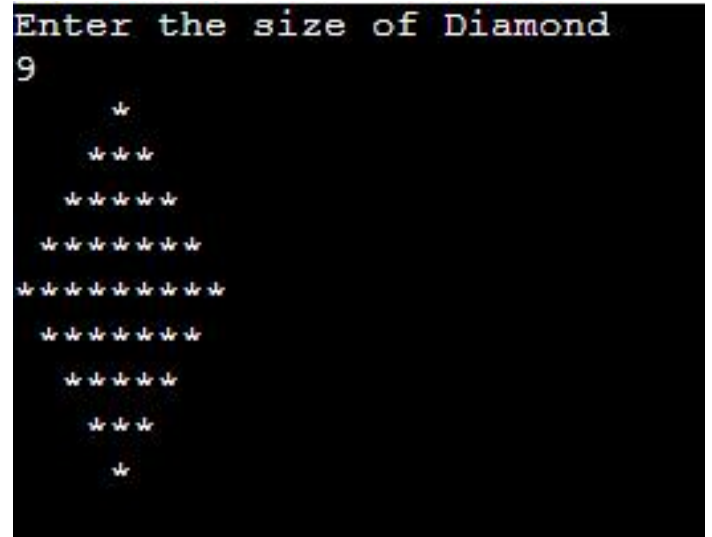
Code:

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

int main(){
    int len ;
    char arr[len];
    cout<<"Enter the size of Diamond"<<endl;
    cin>>len;
    int half = len / 2;
    for (int i = 0; i <= len; i++)
        arr[i] = ' ';

    for (int i = 0; i <= half; i++){
        for (int j = 0; j <= len; j++){
            arr[half - i] = '*';
            arr[half + i] = '*';
            cout << arr[j];}
        cout << endl;}
    for (int i = 0; i <= len; i++){
        for (int j = 0; j <= len; j++){
            arr[i] = ' ';
            arr[len - i - 1] = ' ';
            cout << arr[j];}
        cout << endl;
    }
    return 0;
}
```

Output:



```
Enter the size of Diamond
9
  *
 * *
* * *
* * * *
* * * * *
* * * * *
 * * * *
  * * *
   *
```