

LAB MANUAL 6: -

NAME	Muhammad Shehryar Ismail
CMS ID	461599
SECTION	A

LAB TASKS: -

TASK 1: -

```
1  #include <iostream>
2  using namespace std;
3  int main() {
4  //TASK 1: -
5      int x=0, y=1, z, i, n;
6      cout<<"Enter the number of elements: ";
7      cin>>n;
8      cout<<x<<" "<<y<<" ";
9      for(i=2;i<n;++i)
10     {
11         z=x+y;
12         cout<<z<<" ";
13         x=y;
14         y=z;
15     }
```

C:\Users\ACG\Desktop\C++\LABB MANUAL VI.exe

Enter the number of elements: 12

0 1 1 2 3 5 8 13 21 34 55 89

Process exited after 0.7708 seconds with return value 0

Press any key to continue . . .

TASK 2: -

```
18 //TASK 2: -
19 int rows;
20 cout << "Enter the number of rows : ";
21 cin >> rows;
22 cout << endl;
23
24 for (int i = 0; i < rows; i++)
25 {
26     int val = 1;
27     for (int j = 1; j < (rows - i); j++)
28     {
29         cout << " ";
30     }
31     for (int k = 0; k <= i; k++)
32     {
33         cout << "      " << val;
34         val = val * (i - k) / (k + 1);
35     }
36     cout << endl << endl;
37 }
38 cout << endl;
39
40
41
42 return 0;
43 }
44
```

Enter the number of rows : 6

1

1

1

1

2

1

1

3

3

1

1

4

6

4

1

1

5

10

10

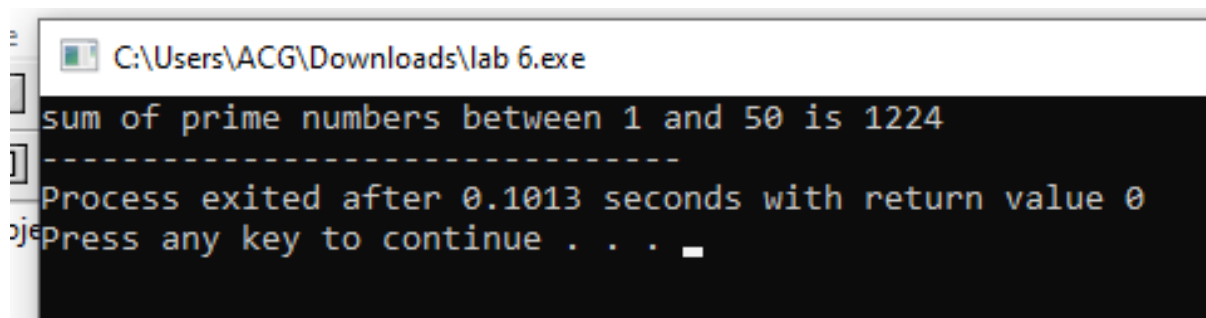
5

1

HOME TASKS: -

TASK 1: -

```
1 //hometasks
2 #include <iostream>
3 #include<math.h>
4 using namespace std;
5 ////task 1
6 int main(){
7     int n,i,sum;
8     sum=2;
9     bool prime;
10    prime=true;
11    for(n=3;n<50;n++){
12        for (i=2;i<=n;i++)
13        {if (n%i==0){
14            prime=false;
15        }
16        }
17        if (prime==true)
18        {    sum=sum+n;
19        }
20        sum=sum+n;
21    }
22
23    }
24    cout<<"sum of prime numbers between 1 and 50 is"<<sum;
25 }
26
27
```



```
C:\Users\ACG\Downloads\lab 6.exe
sum of prime numbers between 1 and 50 is 1224
-----
Process exited after 0.1013 seconds with return value 0
Press any key to continue . . .
```

TASK 2: -

```
28 //task 2
29 int main(){
30     int line;
31     .....
32
33     cout << "Enter the number of rows: ";
34     cin >> line;
35
36     for (int i = 1; i <= line; ++i) {
37         for (int j = 1; j <= i; ++j) {
38             cout << j << " ";
39         }
40         cout << endl;
41     }
42
43     return 0;
44
45 }
```

Enter the number of rows: 12

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10 11
1 2 3 4 5 6 7 8 9 10 11 12
```

Process exited after 0.5118 seconds with return value 0
Press any key to continue . . .

TASK 3: -

```
//task3
int main() {
    int line;

    cout << "Enter the number of lines: ";
    cin >> line;

    for (int i = 1; i <= line; i++) {
        for (int j = 1; j <= i * 2; ++j) {
            cout << i * 2 << " ";
        }
        cout << endl;
    }

    return 0;
}
```

C:\Users\ACG\Downloads\lab 6.exe

```
Enter the number of lines: 12
2 2
4 4 4 4
6 6 6 6 6 6
8 8 8 8 8 8 8 8
10 10 10 10 10 10 10 10 10 10
12 12 12 12 12 12 12 12 12 12 12 12
14 14 14 14 14 14 14 14 14 14 14 14 14 14
16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16
18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18
20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22
24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24 24

-----
Process exited after 1.612 seconds with return value 0
Press any key to continue . . .
```