



# Fundamentals of Programing

## Lab Manual #6

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**TASK 1:**

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

int main(){
    int numr, count, num1, num2, sum, count2;
    num1=0;
    num2=1;
    cout<<"Enter Number of Rows: ";
    cin>>numr;
    cout<<num1<<endl;
    cout<<num1<<" "<<num2<<endl;
    cout<<num1<<" "<<num2<<" "<<num1+num2<<endl;
    for(count=3; count<numr; count++){
        num1=0;
        num2=1;
        cout<<num1<<" "<<num2<<" ";
        for(count2=2; count2<=count; count2++){
            sum=num1+num2;
            num1=num2;
            num2=sum;
            cout<<sum<<" ";
        }
        cout<<endl;
    }
}
```



```
Enter Number of Rows: 25
0
0 1
0 1 1
0 1 1 2
0 1 1 2 3
0 1 1 2 3 5
0 1 1 2 3 5 8
0 1 1 2 3 5 8 13
0 1 1 2 3 5 8 13 21
0 1 1 2 3 5 8 13 21 34
0 1 1 2 3 5 8 13 21 34 55
0 1 1 2 3 5 8 13 21 34 55 89
0 1 1 2 3 5 8 13 21 34 55 89 144
0 1 1 2 3 5 8 13 21 34 55 89 144 233
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765 10946
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765 10946 17711
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765 10946 17711 28657
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765 10946 17711 28657 46368

-----
Process exited after 1.045 seconds with return value 0
Press any key to continue . . .
```

**TASK 2:**

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

int main(){
int count, number, numr, count1;
cout<<"How many Rows?";
cin>>numr;
number=0;
    for(count=0; count<=numr; count++){
        for(count1=0; count1<=count; count1++){
            number=number+1;
            cout<<number<<" ";
        }
        cout<<endl;
    }
}
```

```
How many Rows?10
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31 32 33 34 35 36
37 38 39 40 41 42 43 44 45
46 47 48 49 50 51 52 53 54 55
56 57 58 59 60 61 62 63 64 65 66

-----
Process exited after 3.131 seconds with return value 0
Press any key to continue . . . |
```