CS-114 - Fundamental of Programing
Lab Manual # 06

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

int main() {
    int prev,current,next,terms,i,j;
    cout<<"Enter number of terms: ";
    cin>>terms;
    cout<<" "<<endl;
    cout<<"Fibonacci sequence of "<<terms<<" terms:-"<<endl;
    for(i=0;i<terms;i++)
    {
        prev=0;
        current=1;
        for(j=0;j<=i;j++)
        {
            cout<<prev<<" ";
            next=prev+current;
            prev=current;
            current=next;
        }
        cout<<" "<<endl;
    }
    return 0;
}
```

```
Enter number of terms: 5

Fibonacci sequence of 5 terms:-
0
0 1
0 1 1
0 1 1 2
0 1 1 2 3
```

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

int main() {
    int n,sum,i,j;
    n=0;
    sum=1;
    for(i=0;i<10;i++)
    {
        if(i<=4)
        {
            for(j=0;j<i;j++)
            {
                cout<<sum<<"  ";
                sum++;
            }
        }
        else
        {
            for(j=0;j<i;j++)
            {
                cout<<sum<<" ";
                sum++;
            }
        }
        cout<<endl;
    }
}
```

```
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


-------------------------------
Process exited after 0.02595 seconds with return value 0
Press any key to continue . . .
```

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

int main() {
    int num,i,r,sum,check;
    sum=0;
    check=0;
    for(num=0;num<=50;num++)
    {
        if(num==0||num==1)
        {
            continue;
        }
        for(i=2;i<num;i++)
        {
            r=num%i;
            if(r==0)
            {
                check++;
                break;
            }
        }
        if(check==0&&num!=1)
        {
            sum=sum+num;
        }
        check=0;
    }
    cout<<"The sum of prime numbers between 1 and 50 is "<<sum<<endl;
    return 0;
}
```

```
The sum of prime numbers between 1 and 50 is 328

--------------------------------
Process exited after 0.01715 seconds with return value 0
Press any key to continue . . .
```

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

int main() {
    for(int i=1;i<=5;i++)
    {
        for(int j=1;j<=5;j++)
        {
            if(j<=i)
            {
                cout<<j<<" ";
            }
            else
            {
                continue;
            }
        }
        cout<<endl;
    }
    return 0;
}
```

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

--------------------------------
Process exited after 0.01674 seconds with return value 0
Press any key to continue . . .
```

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

int main() {
    for(int i=1;i<=4;i++)
    {
        if(i==1)
        {
            cout<<i<<endl;
            continue;
        }
        else
        {
            for(int j=1;j<=6;j++)
            {
                for(int k=2;k<=6;k+=2)
                {
                    if(k==j)
                    {
                        for(int l=1;l<=k;l++)
                        {
                            cout<<k<<" ";
                        }
                    }
                    else
                    {
                        continue;
                    }
                    cout<<endl;
                }
            }
            cout<<endl;
        }
        return 0;
    }
}
```

```
1
2 2
4 4 4 4
6 6 6 6 6 6


---------------------------------
Process exited after 0.06501 seconds with return value 0
Press any key to continue . . . _
```