

CS-114 - Fundamental of Programing

Lab Manual # 06

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LAB TASK 1

```
1  #include<iostream>
2  using namespace std;
3
4  int main() {
5      int prev,current,next,terms,i,j;
6      cout<<"Enter number of terms: ";
7      cin>>terms;
8      cout<<" "<<endl;
9      cout<<"Fibonacci sequence of "<<terms<<" terms:-"<<endl;
10     for(i=0;i<terms;i++)
11     {
12         prev=0;
13         current=1;
14         for(j=0;j<=i;j++)
15         {
16             cout<<prev<<" ";
17             next=prev+current;
18             prev=current;
19             current=next;
20         }
21         cout<<" "<<endl;
22     }
23     return 0;
24 }
```

```
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
```

LAB TASK 2

```

1  #include<iostream>
2  using namespace std;
3
4  int main() {
5      int n,sum,i,j;
6      n=0;
7      sum=1;
8      for(i=0;i<10;i++)
9      {
10         if(i<=4)
11         {
12             for(j=0;j<i;j++)
13             {
14                 cout<<sum<<" ";
15                 sum++;
16             }
17         }
18         else
19         {
20             for(j=0;j<i;j++)
21             {
22                 cout<<sum<<" ";
23                 sum++;
24             }
25         }
26         cout<<endl;
27     }
28 }

```

```

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 . . .

```

```

1  #include<iostream>
2  using namespace std;
3
4  int main() {
5      int num,i,r,sum,check;
6      sum=0;
7      check=0;
8      for(num=0;num<=50;num++)
9      {
10         if(num==0||num==1)
11         {
12             continue;
13         }
14         for(i=2;i<num;i++)
15         {
16             r=num%i;
17             if(r==0)
18             {
19                 check++;
20                 break;
21             }
22         }
23         if(check==0&&num!=1)
24         {
25             sum=sum+num;
26         }
27         check=0;
28     }
29     cout<<"The sum of prime numbers between 1 and 50 is "<<sum<<endl;
30     return 0;
31 }

```

HOME TASK 1

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 . . .

```

1  #include<iostream>
2  using namespace std;
3
4  int main() {
5      for(int i=1;i<=5;i++)
6      {
7          for(int j=1;j<=5;j++)
8          {
9              if(j<=i)
10             {
11                 cout<<j<<" ";
12             }
13             else
14             {
15                 continue;
16             }
17         }
18         cout<<endl;
19     }
20     return 0;
21 }

```

HOME TASK 2

```

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 . . .

```

HOME TASK 3

```
1 #include<iostream>
2 using namespace std;
3
4 int main() {
5     for(int i=1;i<=4;i++)
6     {
7         if(i==1)
8         {
9             cout<<i<<endl;
10            continue;
11        }
12        else
13        {
14            for(int j=1;j<=6;j++)
15            {
16                for(int k=2;k<=6;k+=2)
17                {
18                    if(k==j)
19                    {
20                        for(int l=1;l<=k;l++)
21                        {
22                            cout<<k<<" ";
23                        }
24                    }
25                    else
26                    {
27                        continue;
28                    }
29                    cout<<endl;
30                }
31            }
32            cout<<endl;
33        }
34    }
35    return 0;
36 }
```

```
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 . . .
```