OOP LAB

Week1

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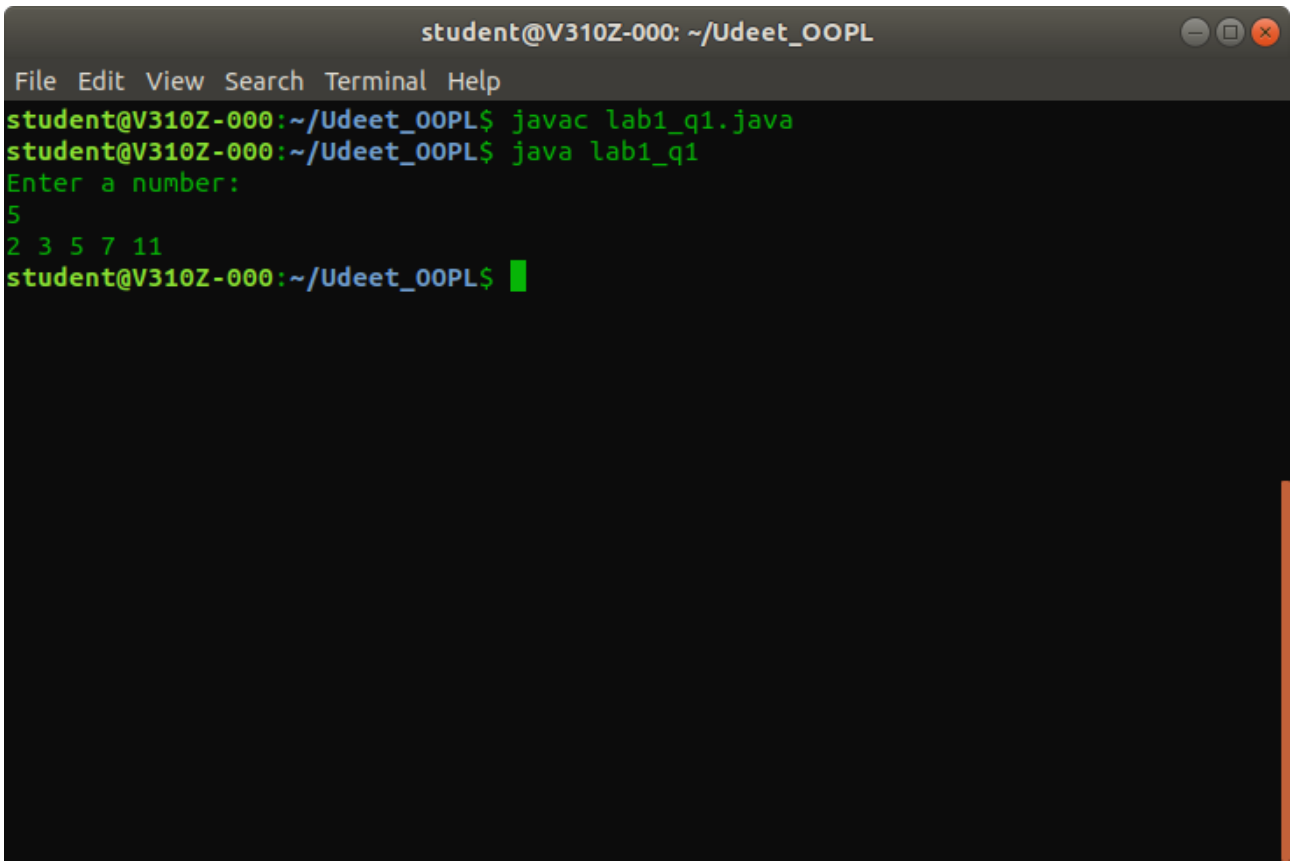
CSE C3
Roll Number 64

1.1.a. Write a method isPrime() to accept one integer parameter and to check whether that parameter is prime or not.

1.b. Using this method, generate first N prime numbers in the main method.

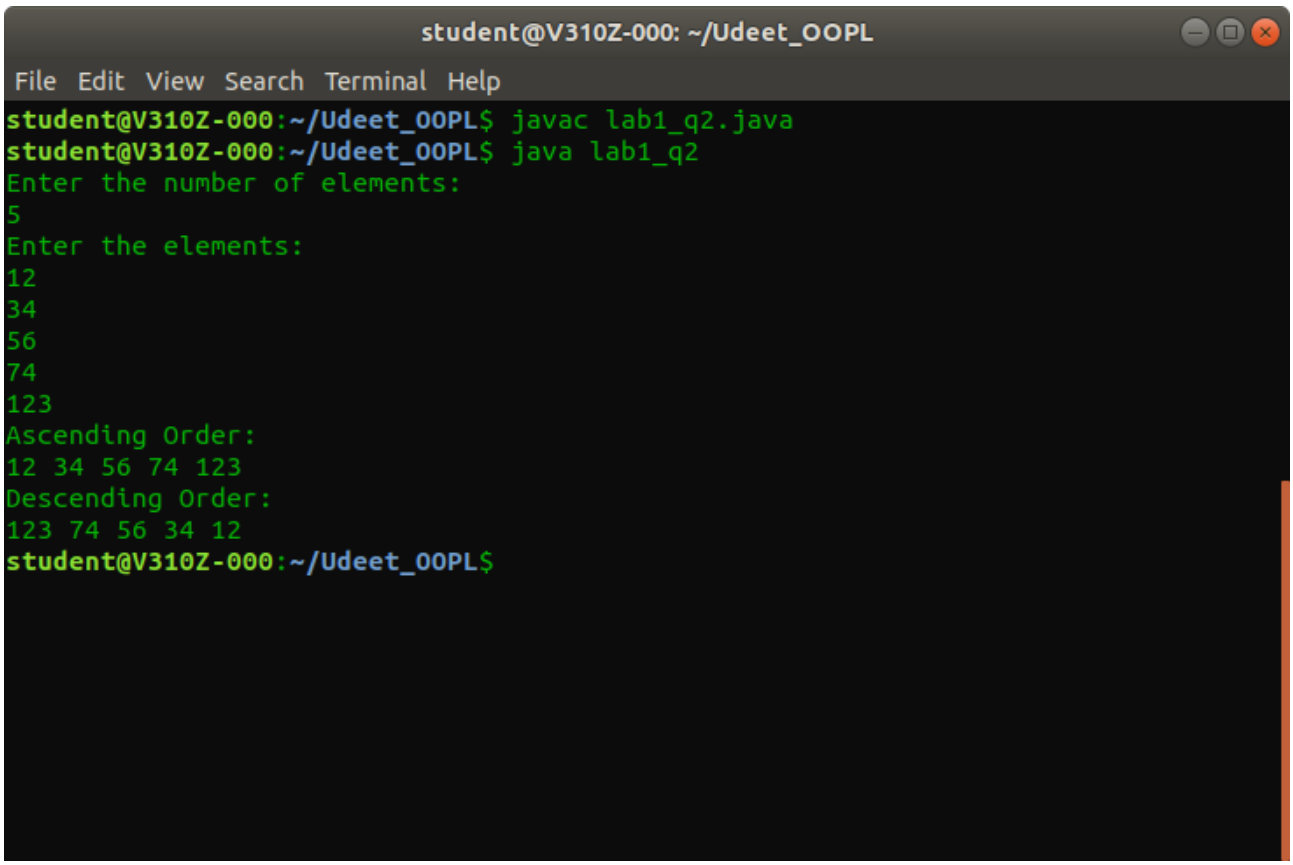
```
 import java.util.Scanner;
class lab1
{
public static void main(String args[])
{
	Scanner sc=new Scanner(System.in);
	System.out.println("Enter a number:");
	int n=sc.nextInt();
	int i=2;
	while(n!=0)
	{	if(isPrime(i)==true){
		System.out.print(i+" ");
		n--;
	}
	i++;
	}
System.out.println();
}
public static boolean isPrime(int n)
{
	for(int i=2;i<=n/2;i++)
	{
		if(n%i==0)
			return false;
	}
	return true;
}


}
```



2.Arrange the elements in ascending and descending order using Bubble sort method

```
import java.util.Scanner;
class lab1_q2{

public static void main(String[] args) {
Scanner x=new Scanner(System.in);
int n;
System.out.println("Enter the number of elements:");
n=x.nextInt();
int arr[]=new int[n];
System.out.println("Enter the elements:");
for(int i=0;i<n;i++)
        arr[i]=x.nextInt();
for(int i=0;i<n;i++)
{
        for(int j=i+1;j<n;j++)
        {
                if(arr[j]<arr[i])
                {
```

```
                        int temp=arr[i];
                        arr[i]=arr[j];
                        arr[j]=temp;
                }
        }
}
System.out.println("Ascending Order:");
        for(int i=0;i<n;i++)
                        System.out.print(arr[i]+" ");
System.out.println();

for(int i=0;i<n;i++)
{
        for(int j=i+1;j<n;j++)
        {
                if(arr[i]<arr[j])
                {
                        int temp=arr[i];
                        arr[i]=arr[j];
                        arr[j]=temp;
                }
        }
}
System.out.println("Descending Order:");
for(int i=0;i<n;i++)
System.out.print(arr[i]+" ");
System.out.println(n);


}


}
```



3. Find the addition of two matrices and display the resultant matrix.

```
import java.util.Scanner;
class lab1_q3{

public static void main(String[] args) {
Scanner x=new Scanner(System.in);
int i,j;
int m,n;
System.out.println("Enter the dimensions of the matrix:");
m=x.nextInt();
n=x.nextInt();
int a[][]=new int[m][n];
int b[][]=new int[m][n];
int c[][]=new int[m][n];
System.out.println("Enter Matrix 1:");
for(i=0;i<m;i++)
{
        for(j=0;j<n;j++)
        {
                a[i][j]=x.nextInt();
        }
}System.out.println();
System.out.println("Enter Matrix 2:");
for(i=0;i<m;i++)
```

```
{
        for(j=0;j<n;j++)
        {
                b[i][j]=x.nextInt();
        }
}
System.out.println();
for(i=0;i<m;i++)
{
        for(j=0;j<n;j++)
        {
                c[i][j]=a[i][j]+b[i][j];
        }
}
System.out.println("Sum of the matrices:");
for(i=0;i<m;i++)
{
        for(j=0;j<n;j++)
        {
                System.out.print(c[i][j]+" ");
        }System.out.println();
}
System.out.println();
}
}
```