Graded Lab 1

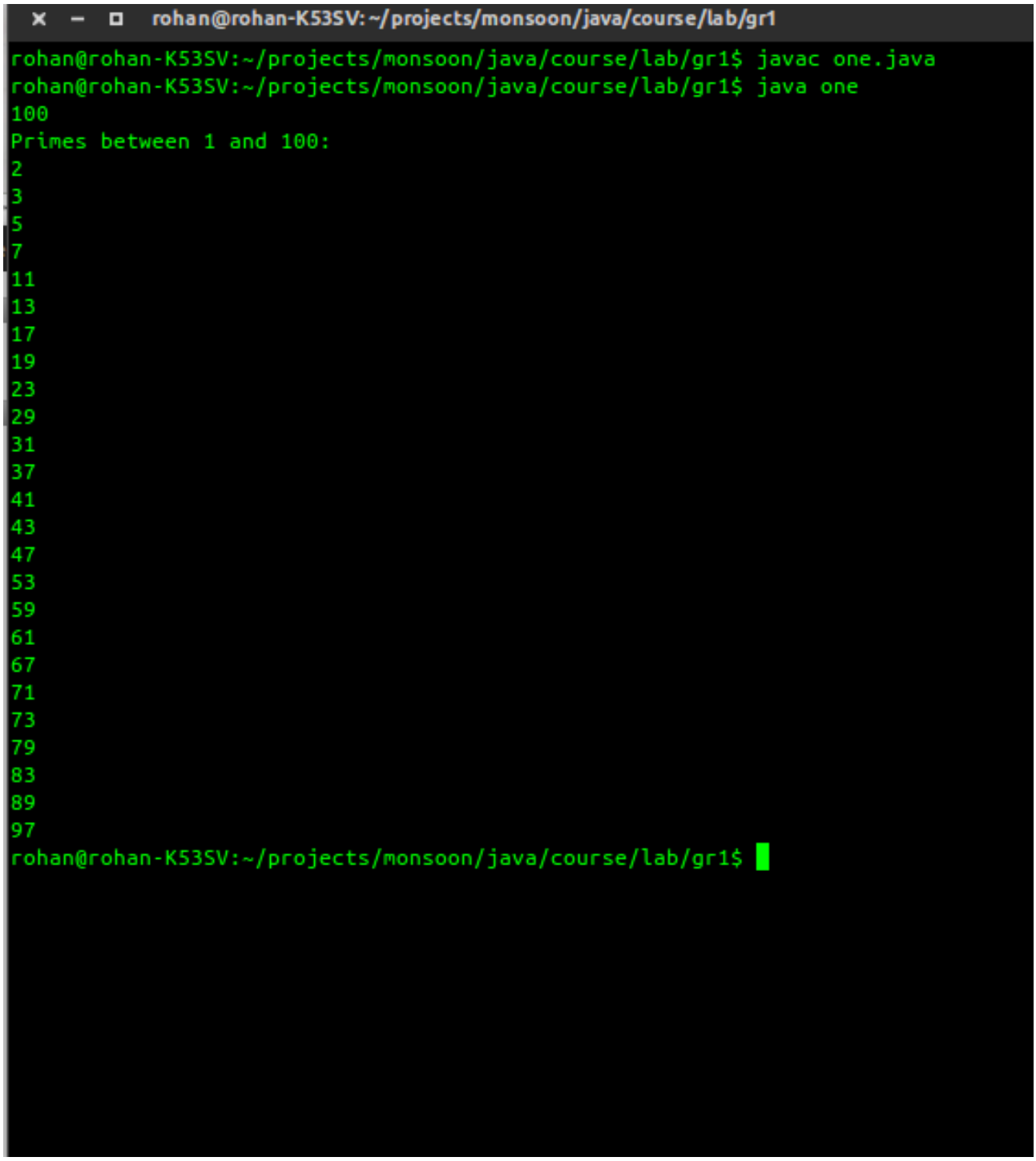
CSD 207
Shiv Nadar University

Professor Sulabh Bansal

Submitted By:

Rohan Verma
1510110508
Btech CSE, II Year

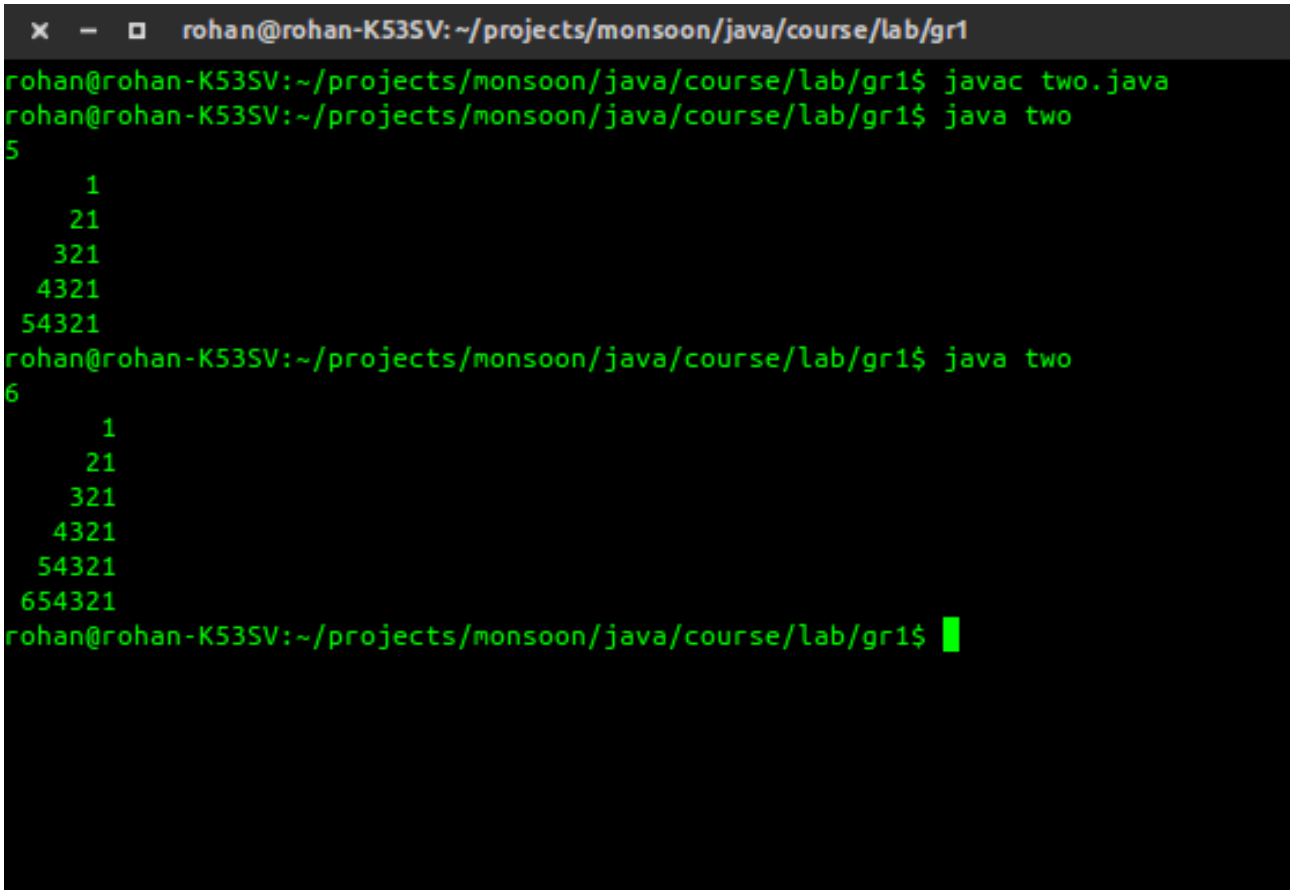
```
/*
Q1. Prime number generator

Author: Rohan Verma (hello@rohanverma.net)
```




```
*/
import java.util.Scanner;


public class one {

        public static int isPrime(int x){
                for(int i = 2; i * i <= x; i++){
                        if(x % i == 0) return 0;
```

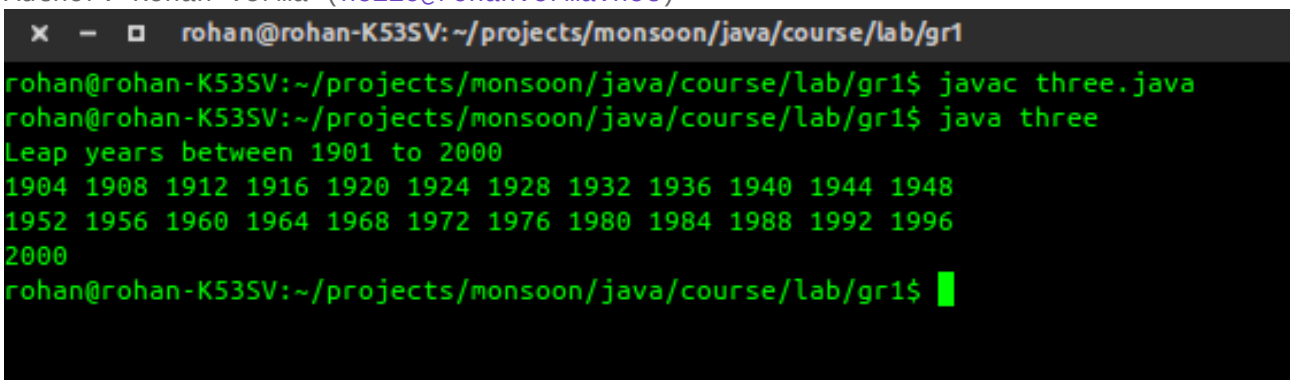
```
                }
                return 1;
        }

        public static void main( String [] args )
        {

                int num;

                Scanner s = new Scanner(System.in);

                num = s.nextInt();

                System.out.println("Primes between 1 and " + num + ": ");

                for(int i = 2; i <= num; i++){
                        if(isPrime(i) == 1){
                                System.out.println(i);
                        }
                }
        }
}
```

```
/*

Q2. Pyriamid

Author: Rohan Verma (hello@rohanverma.net)
```




```
*/
import java.util.Scanner;


public class two {

        public static void main( String [] args )
        {

                int num;

                Scanner s = new Scanner(System.in);

                num = s.nextInt();

                for(int i = 0; i < num; i++){
                        for(int j = i; j < num; j++){
                                System.out.print(" ");
                        }
                        for(int j = num - i - 1; j < num; j++){
                                System.out.print(num - j);
                        }
                        System.out.print('\n');
                }
        }
```

```
/*
Q3. Leap years between 1901 and 2000

Author: Rohan Verma (hello@rohanverma.net)
```




```
*/
import java.util.Scanner;
public class three {
        public static int isPrime(int x){
                for(int i = 2; i * i <= x; i++){
                        if(x % i == 0) return 0;
                }
                return 1;
        }

        public static void main( String [] args )
        {

                int BEGIN = 1901, END = 2000, printed = 0;

                Scanner s = new Scanner(System.in);

                System.out.println("Leap years between 1901 to 2000 ");

                for(int i = BEGIN; i <= END; i++)
                {

                        if ( i%400 == 0)
                        {
                                System.out.print(i + " ");
                                printed++;
                        }
                        else if ( i%100 == 0)
                                ;
                        else if ( i%4 == 0 )
                        {
                                System.out.print(i + " ");
                                printed++;
                        }



                        if(printed%12== 0 && printed != 0) {
                                System.out.println();
                                printed = 0;
                        }
                }

                System.out.println();
        }
}
```