Assignment-1

Program 1: Write a program to convert USD to INR and INR to USD.

```
class CurrencyConverter
{
         public static void main(String args[])
                   {
                             int currency= Integer.parseInt(args[0]);
                             float rate=68;
                             int currencyType= Integer.parseInt(args[1]);
                             if(currencyType==1)
                                       System.out.println("$" + "=" + (currency*rate) + "INR");
                             else
                                       System.out.println("INR" + currency + "=" +(currency/rate) + "$");
                   }
}
 crosoft Windows [Version 10.0.16299.15]
2) 2017 Microsoft Corporation. All rights reserved.
 \program>java CurrencyConverter 2000 1
136000.0INR
 \program>java CurrencyConverter 2000 2
R2000=29.411764$
 # O Type here to search
```

Program 2: Write a program to convert Binary to Decimal and Decimal to Binary.

```
class BinaryToDecimal
{
        public static int binaryToDecimal(int binary)
       {
               int rem;
               int i =0;
               int decimal = 0;
               while(binary!=0)
               {
                        rem=binary%10;
                       decimal += rem*Math.pow(2,i);
                        binary = binary/10;
                       i++;
               }
               return decimal;
       }
        public static String decimalToBinary(int decimal)
       {
               int binaryNum;
               String binary = "";
               while(decimal>0)
               {
                        binaryNum = decimal%2;
                        binary = binary + "" + binaryNum;
                        decimal = decimal/2;
               }
               return binary;
```

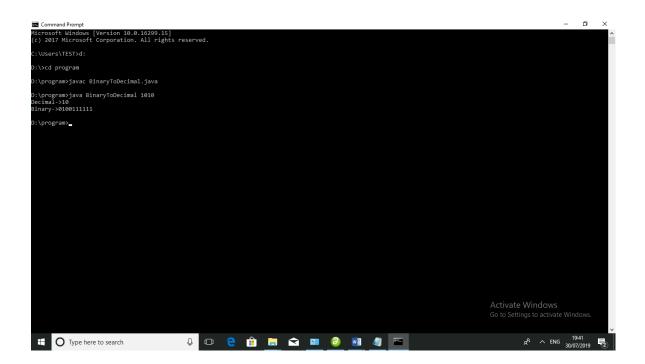
```
public static void main(String args[]){
    int number = Integer.parseInt(args[0]);

    int d = binaryToDecimal(number);

    String b = decimalToBinary(number);

    System.out.println("Decimal->"+d);

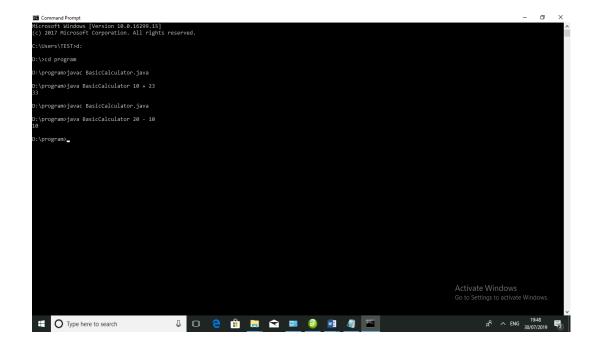
    System.out.println("Binary->"+b);
}
```



Program 3: Write a program to implement Basic Calculator.

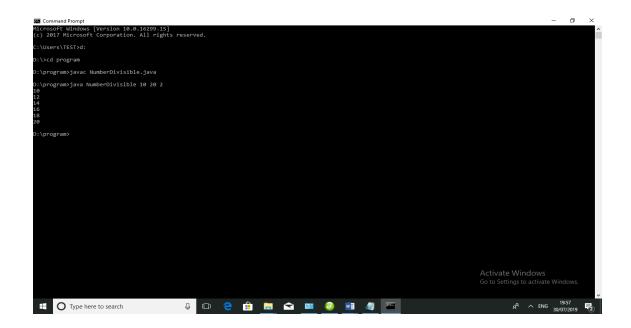
```
class BasicCalculator
{
        public static void main(String args[])
        {
                int num1 = Integer.parseInt(args[0]);
                int num2 = Integer.parseInt(args[2]);
                String op = args[1];
                if(op.equals("+")){
                                int addition = num1 + num2;
                                System.out.println(addition);
                }else if(op.equals("-")){
                                int subtraction = num1 - num2;
                                System.out.println(subtraction);
                }else if(op.equals("x")){
                                int multiplication = num1 * num2;
                                System.out.println(multiplication);
                }else if(op.equals("/")){
                                float division = num1/num2;
                                System.out.println(division);
                }else{
                        System.out.println("Enter Valid Operation Symbol");
                }
        }
```

}



Program 4: Write a program to list the number divisible by n between n1 and n2 range.

```
class NumberDivisible
{
        public static void main(String args[])
        {
                if (args.length!=3){
                        System.out.println("Invalid Parameters\nValid Format:\n java <filename>
<startingRange> <endingRange> <Divisor> \n E.g: java NumberDivisible 10 20 2");
                }
                int range1 = Integer.parseInt(args[0]);
                int range2 = Integer.parseInt(args[1]);
                int n = Integer.parseInt(args[2]);
                for(int i = range1;i<=range2;i++)</pre>
                {
                        if((i%n)==0)
                        {
                                 System.out.println(i);
                        }
                }
        }
}
```



Program 5: Write a program to display first N prime numbers

```
public class PrimeNumbers
{
        public static void main(String args[])
        {
                if (args.length!=1){
                         System.out.println("Invalid Parameters\nValid Format:\n java <filename>
<range>\n E.g: java PrimeNumbers 10");
                }
                 int range = Integer.parseInt(args[0]);
                 for(int i=1;i<=range;i++)</pre>
                 {
                         int count=0;
                         for(int j=1;j<=range;j++)</pre>
                        {
                                 if(i%j==0)
                                 {
                                         count++;
                                 }
                        }
                                 if(count==2)
                                 {
                                         System.out.println(i);
                                 }
                 }
        }
}
```

