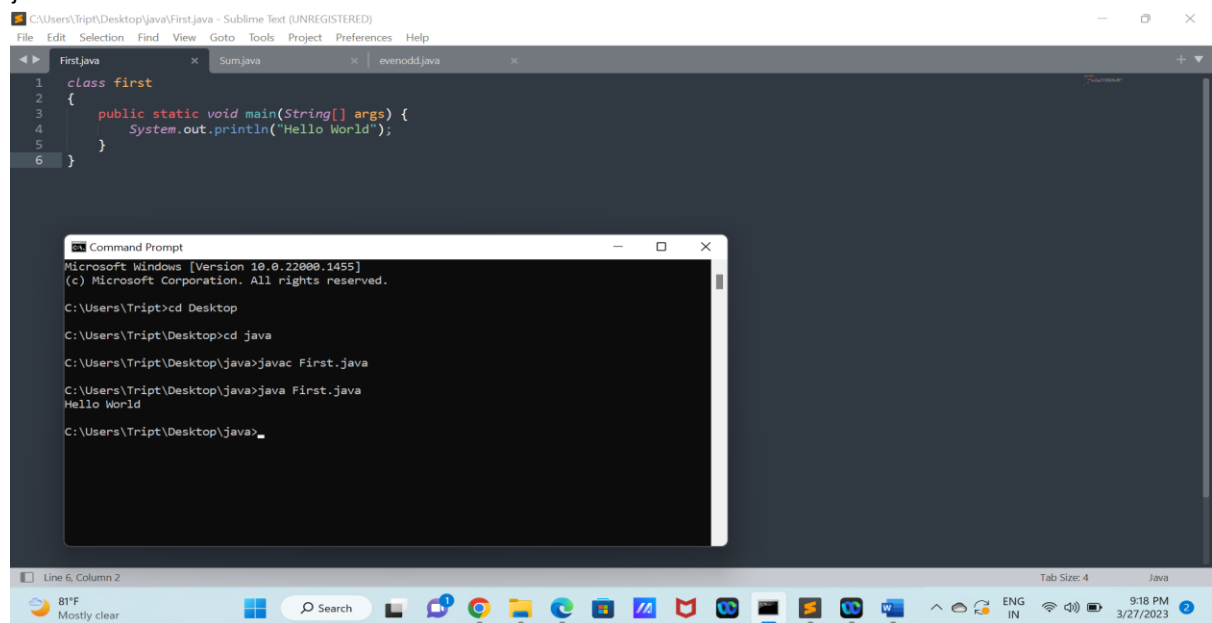# CDAC Hyderabad

PG-DAC March 2023

OOPs With Java

Assignment-1

Name: Tripti Thakur

1. Write a Java Program to Print Hello World

   Ans. class first
   {
          public static void main(String[] args)
   {
             System.out.println("Hello World");
          }
   }
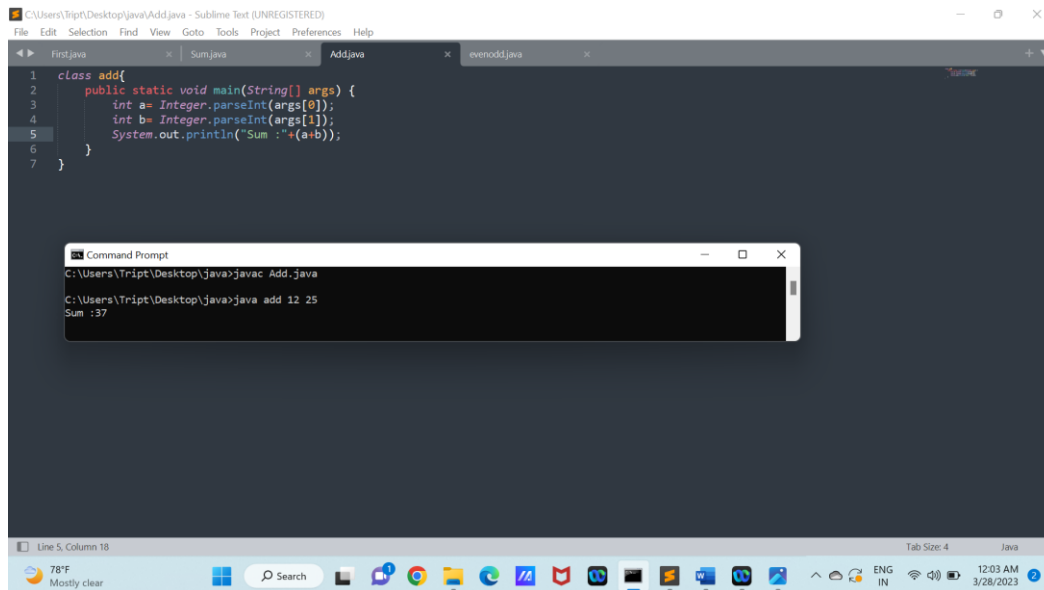
2. Write a Java Program to Add two numbers/binary numbers/characters.

   Ans. class add{
          public static void main(String[] args) {
             int a= Integer.parseInt(args[0]);
             int b= Integer.parseInt(args[1]);
             System.out.println("Sum :"+(a+b));
          }
   }

3. Write a Java Program to Calculate compound interest.

Ans.

```java
public class CompoundInterest {

  public static void main (String args[]){

    double principle=2000, rate=4.5, time=2, compound_interest;

    compound_interest = principle * (Math.pow((1 + rate / 100), time)) - principle;

    System.out.println("The Compound Interest is : " + compound_interest);

  }

}
```
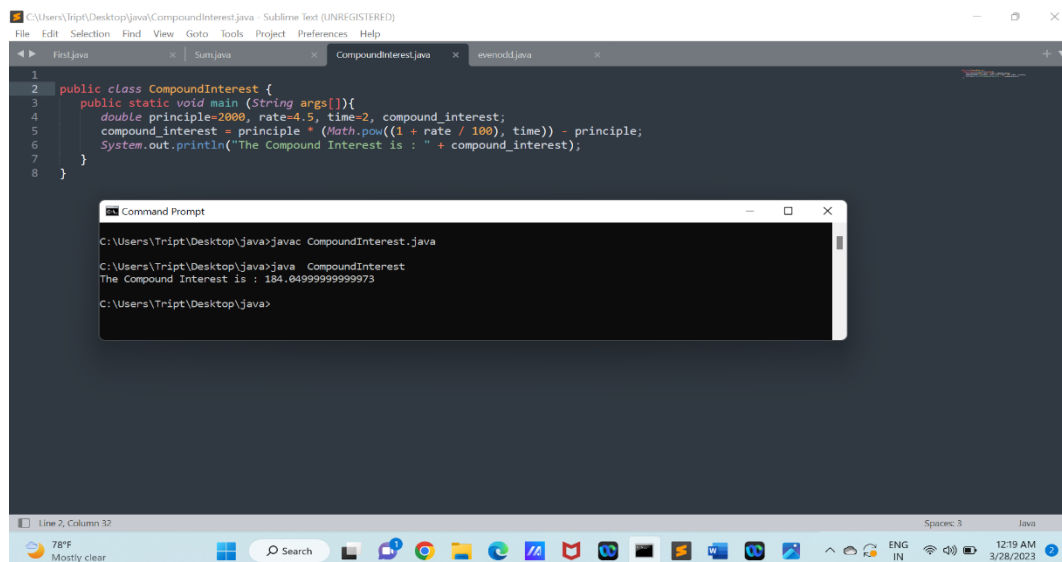
4. Write a Java Program to Calculate power of a number.

Ans. import java.util.Scanner;

class Power{

    public static void main(String[] args) {

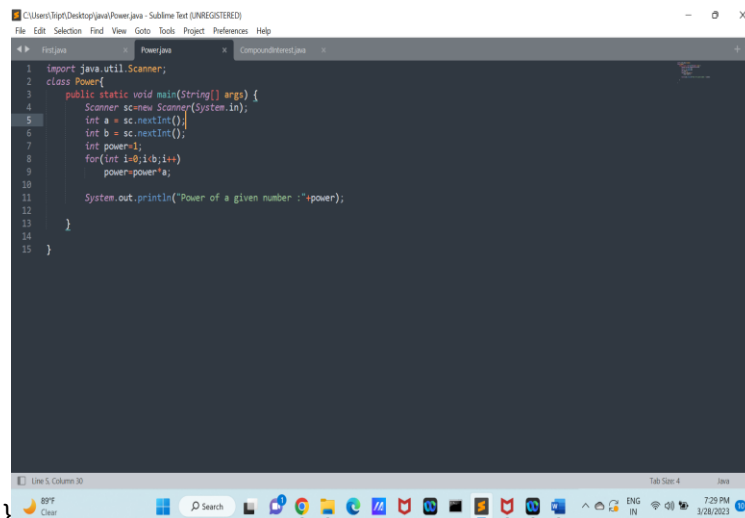   Scanner sc=new Scanner(System.in);

            int a = sc.nextInt();
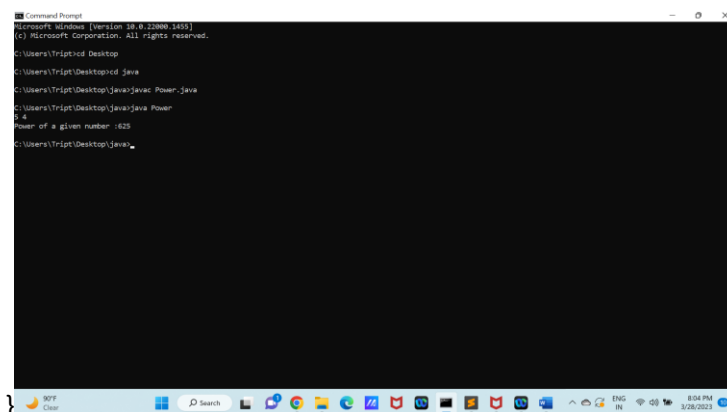
            int b = sc.nextInt();

    int power=1;

    for(int i=0;i<b;i++)

            power=power*a;

            System.out.println("Power of a given number :"+power);

}

}

5. Write a Java Program to Swap two numbers.
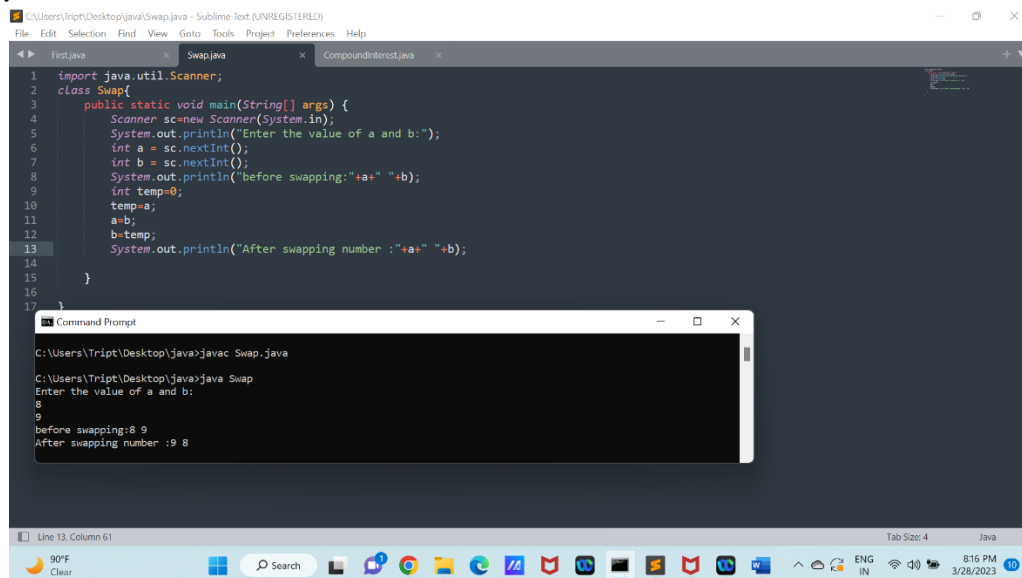   Ans. import java.util.Scanner;
   class Swap{
           public static void main(String[] args) {
                   Scanner sc=new Scanner(System.in);
                   System.out.println("Enter the value of a and b:");
                   int a = sc.nextInt();
                   int b = sc.nextInt();
                   System.out.println("before swapping:"+a+" "+b);
       int temp=0;
       temp=a;
       a=b;
       b=temp;
                   System.out.println("After swapping number :"+a+" "+b);

           }

}

6. Write a Java Program to Calculate area of rectangle.
   Ans. import java.util.Scanner;
   class Rectangle{
           public static void main(String[] args) {
                   Scanner sc=new Scanner(System.in);
                   System.out.println("Enter the value of length and breadth:");
                   float l = sc.nextFloat();
                   float b = sc.nextFloat();
       float rect =l*b;
                   System.out.println("Area of a rectangle :"+rect+"square metre");

```
}
}
```


7. Write a Java Program to Calculate area and circumference of circle using multiple classes.
   Ans. import java.util.Scanner;
   public class circle{
           public static void main(String[] args) {
                   Scanner sc= new Scanner(System.in);
                   System.out.println("Enter radius of a circle :");
                   float r=sc.nextFloat();
                   float circum=2*(float)Math.PI*r;
                   float area = (float)Math.PI*r*r;
                   System.out.println("circumference of a circle :"+circum);
                   System.out.println("Area of a circle :"+area);

}

)

8. Write a Java Program to find ASCII value of a character.
Ans. import java.util.*;
public class Ascii{
            public static void main(String[] args) {

                    Scanner sc=new Scanner(System.in);
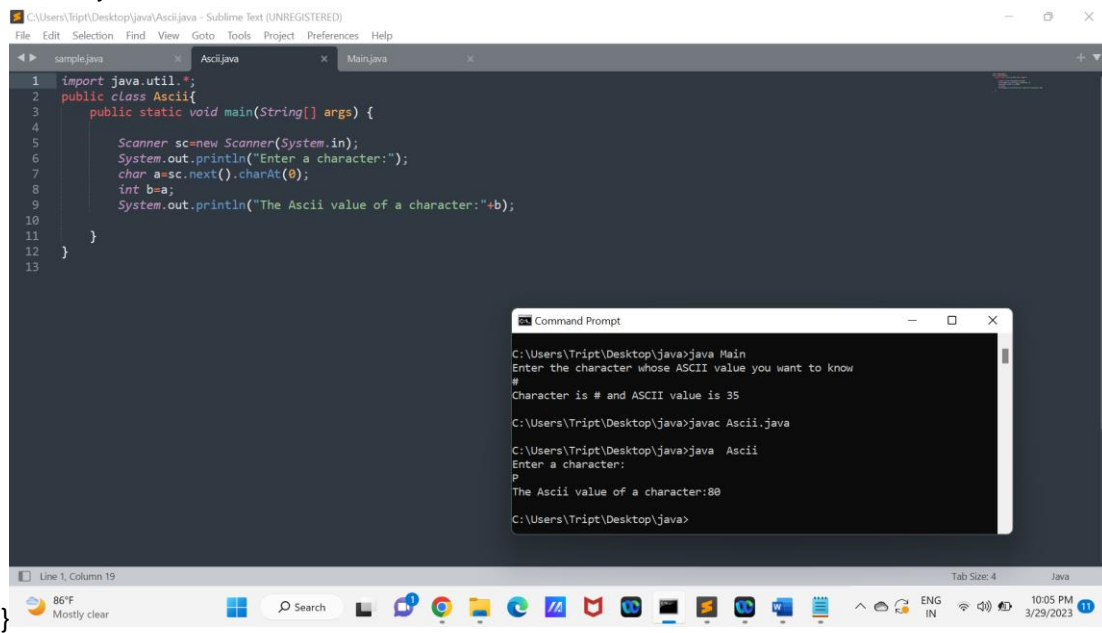   System.out.println("Enter a character:");
                    char a=sc.next().charAt(0);
                    int b=a;
                    System.out.println("The Ascii value of a character:"+b);

            }

}

9. Write a Java Program to Print default values of primitive data type variables.

Ans. public class Primitive {

    static boolean a;

    static int b;

    static long c;

    static byte d;

    static float e;

    static double f;

    static short g;

static char h;

public static void main(String[] args) {

  System.out.println("Default value of boolean Type = " + a);

  System.out.println("Default value of int Type = " + b);

  System.out.println("Default value of long Type = " + c);

  System.out.println("Default value of byte Type = " + d);

  System.out.println("Default value of float Type = " + e);

  System.out.println("Default value of double Type = " + f);

  System.out.println("Default value of short Type = " + g);

  System.out.println("Default value of char Type = " + h);

 }

}

10. Write a Java Program to Swap two variables without using the third variable.

Ans. import java.util.Scanner;

class Swapping{

        public static void main(String[] args) {

                Scanner sc=new Scanner(System.in);

                System.out.println("Enter the value of a and b:");

int a = sc.nextInt();

int b = sc.nextInt();

System.out.println("before swapping:"+a+" "+b);

a=a+b;

b=a-b;

a=a-b;

System.out.println("After swapping number :"+a+" "+b);

}}

11. Write a Java Program to Print Fibonacci series till n times.

Ans. class fibonacci

{

public static void main(String[] args) {

int n=15;

int fib0 =0, fib1 =1;

System.out.println("fibonacci series is:\n");

for(int i=0;i<15;i++){

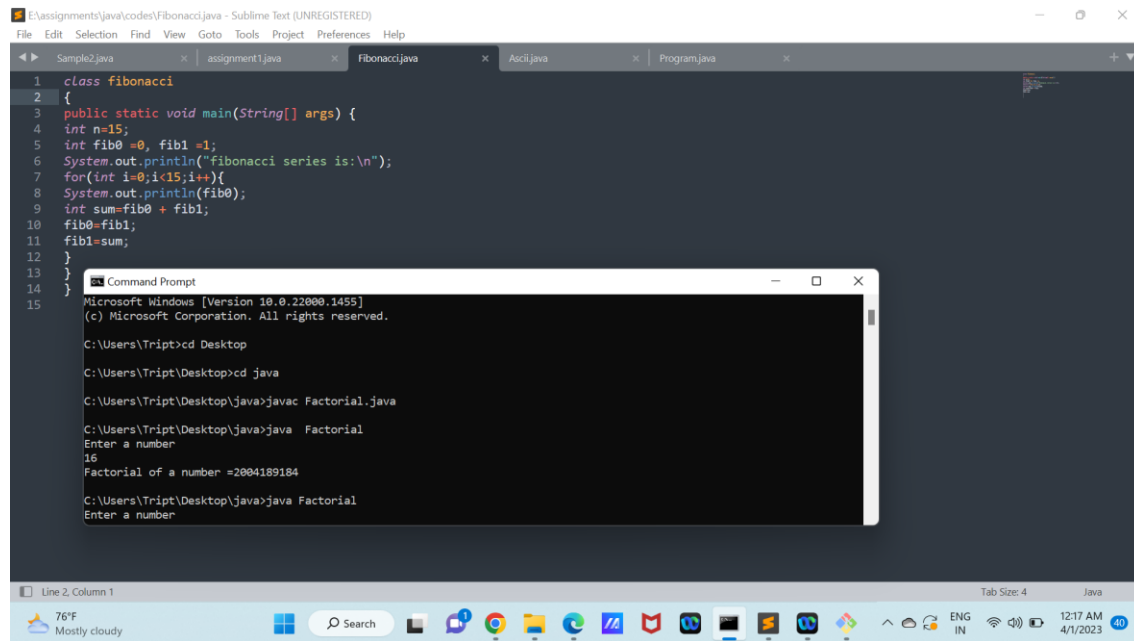System.out.println(fib0);

int sum=fib0 + fib1;

fib0=fib1;

fib1=sum;

}

}

}