1) Write a Java program to print the sum of two numbers.

```
class SumOfTwoNumber
{
    int a=20,b=40;
    public static void main(String args[])
    {
            SumOfTwoNumber object=new SumOfTwoNumber();
            System.out.println(" Sum of Two Number : "+(object.a+object.b));
    }
}
```

2) Write a Java program to accept a number and check the number is even or not. Prints 1 if the number is even or 0 if the number is odd.

```
import java.util.Scanner;
class CheckNumber
{
    public static void main(String args[])
    {
            Scanner UserInput = new Scanner(System.in);
            System.out.println("Enter the number : ");
    int n = UserInput.nextInt();
            if(n%2 == 0)
            {
                    System.out.println(1);
            }
            else
            {
                    System.out.println(0);
            }
    }
}
```

3) Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers arithmetic operation will be of user choice.

```
import java.util.Scanner;
class ArithmeticOperation
{
    public static void main(String args[])
    {
            Scanner userInput = new Scanner(System.in);

            System.out.println(" Enter the First number : ");
            int a= userInput.nextInt();
```

```
            System.out.println(" Enter the Second number : ");
            int b= userInput.nextInt();

            System.out.println("\nAddition : "+(a+b));
            System.out.println("Subtract : "+(a-b));
            System.out.println("Divide : "+(a/b));
            System.out.println("Multiply : "+(a*b));
            System.out.println("Remainder : "+(a%b)+"\n");
    }
}
```

4) Write a Java program and compute the sum of the digits of an integer. Go to the editor Input Data: Input an integer: 25 Expected Output The sum of the digits is: 7.

```
import java.util.Scanner;
class SumOfDigit
{
    public static void main(String args[])
    {
            Scanner UserInput=new Scanner(System.in);

            System.out.println("Enter the number : ");
            int digit = UserInput.nextInt();
            System.out.println("The Sum Is Given Numbers : "+SumDigits(digit));
    }

    public static int SumDigits(long n)
    {
            int result=0;
            while (n>0)
            {
                    result+=n%10;
                    n/=10;
            }
            return result;
    }
}
```

5) Write a Java program to reverse a string.

```
import java.util.Scanner;

class ReverseString
{
    public static void main(String args[])
    {
            Scanner userInput=new Scanner(System.in);
```

```
            System.out.println("\nEnter the String Which You want to reverse : ");

            String str = userInput.nextLine();
            System.out.println("\nOriginal string : "+str);

            //reverse string
            StringBuilder revString = new StringBuilder(str);
            revString.reverse();

            //To save in any string and show it.
            String afterReverseString  = revString.toString();
            System.out.println("Reverse String : "+ afterReverseString+"\n");
    }
}
```

6) Write a Java program to count the letters, spaces, numbers and other characters of an input string.

```
class StringCount
{
    public static void main(String args[])
    {
            String test = " Hello World 1 2 3 ";
            count(test);
    }
    public static void count(String x)
    {
            char[] ch=x.toCharArray();
            int letter =0;
            int space =0;
            int num =0;
            int other =0;
            for (int i =0;i<x.length();i++)
            {
                    if(Character.isLetter(ch[i]))
                    {
                            letter++;
                    }
                    else if (Character.isDigit(ch[i]))
                    {
                            num++;
                    }
                    else if(Character.isSpaceChar(ch[i]))
                    {
                            space ++;
                    }
                    else
```

```
                    {
                        other++;
                    }
                }
                System.out.println("The String is : Hello World 1 2 3 ");
                System.out.println("letter : "+letter);
                System.out.println("space : "+space);
                System.out.println("number : "+num);
                System.out.println("other :"+other);
        }
}
```

7) Write a Java program to print the ascii value of a given character.

```
import java.util.Scanner;
class PrintAsciiValue
{
    public static void main(String args[])
    {
            Scanner userInput = new Scanner(System.in);
            System.out.println("Enter The Character : ");

            char Character = userInput.next().charAt(0);
            int AsciiValue = Character;
            System.out.println("Ascii value of "+Character+" is : "+AsciiValue);
    }
}
```

8) Write a Java program to display the system time.

```
class PrintSystemTime
{
    public static void main(String args[])
    {
            System.out.format("\nCurrent Date Time :%tc%n \n",System.currentTimeMillis());
    }
}
```

9) Write a Java program to print the odd numbers from 1 to 9. Prints Num/line.

```
class PrintOddNumber
{
    public static void main(String ags[])
    {
            for (int i = 1;i<10;i++)
            {
                    if(i % 2 >= 1) //or you can set in (i%2 != 0)
```

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

10) Write a Java program to capitalize the first letter of each word in a sentence.

```
import java.util.Scanner;
class CapitalString
{
    public static void main(String args[])
    {
            Scanner userInput=new Scanner(System.in);
            System.out.println("Enter the sentence : ");

            String UpperCaseFirstLetter = userInput.nextLine();
            String upper_case_line="";

            Scanner LineScan = new Scanner(UpperCaseFirstLetter);
            while(LineScan.hasNext())
            {
                    String word = LineScan.next();
                    upper_case_line+= Character.toUpperCase(word.charAt(0)) + word.substring(1)
+ " ";
            }
            System.out.println(upper_case_line.trim());
    }
}
```

11) Write a Java program to reverse a word.

```
import java.util.Scanner;
class ReverseWord
{
    public static void main(String args[])
    {
            Scanner userInput = new Scanner ( System.in );
            System.out.println("Enter the word : ");

            String NewWord = userInput.nextLine();
            System.out.println("\nOriginal Word : "+NewWord);

            StringBuilder ReverseWord = new StringBuilder(NewWord);
            ReverseWord.reverse();

            String AfterReverseWord = ReverseWord.toString();
```

```
                System.out.println("\nReverse word : "+AfterReverseWord+"\n");
        }
    }
```

12) Write a Java program to get the larger value between first and last element of an array (length 3) of integers. Go to the editor Sample Output: Original Array: [20, 30, 40] Larger value between first and last element: 40

```
import java.util.Arrays;
public class maxSize
{
    public static void main(String[] args)
    {
            int[] array_nums = {20, 30, 40};
            System.out.println("Original Array: "+Arrays.toString(array_nums));
            int max_val = array_nums[0];
                if(array_nums[2] >= max_val)
                max_val = array_nums[2];
                System.out.println("Larger value between first and last element: "+max_val);
    }
}
```

13) Write a Java program to sort array elements.

```
public class SortAsc {
   public static void main(String[] args) {
      // Initialize array
      int[] arr = new int[] { 5, 2, 8, 7, 1 };
      int temp = 0;
      // Displaying elements of original array
      System.out.println("Elements of original array: ");
      for (int i = 0; i < arr.length; i++) {
         System.out.print(arr[i] + " ");
      }
      // Sort the array in ascending order
      for (int i = 0; i < arr.length; i++) {
         for (int j = i + 1; j < arr.length; j++) {
            if (arr[i] > arr[j]) {
               temp = arr[i];
               arr[i] = arr[j];
               arr[j] = temp;
            }
         }
      }
      System.out.println();
      // Displaying elements of array after sorting
      System.out.println("Elements of array sorted in ascending order: ");
      for (int i = 0; i < arr.length; i++) {
```

```
            System.out.print(arr[i] + " ");
        }
    }
}
```

14) Write a program to add two numbers using function overloading.

```
class Adder {
    static int add(int a, int b) {
        return a + b;
    }

    static int add(int a, int b, int c) {
        return a + b + c;
    }
}

class TestOverloading1 {
    public static void main(String[] args) {
        System.out.println(Adder.add(11, 11));
        System.out.println(Adder.add(11, 11, 11));
    }
}
```

15) Write a program to input Employee Details and display it on proper format.

```
import java.util.*;

public class EmpData {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        String ename;
        System.out.println("enter the ename of Employee :-");
        ename = sc.nextLine();
        int eid;
        System.out.println("enter the eid of Employee:-");
        eid = sc.nextInt();
        int Salary;
        System.out.println("enter the Salary of Employee :-");
        Salary = sc.nextInt();
        System.out.println();
        System.out.println("eid : " + eid);
        System.out.println("ename : " + ename);
        System.out.println("Salary : " + Salary);
    }
}
```

16) Write a program to design three classes that accept dimension of triangle and rectangle and calculate area of rectangle and triangle .

```
import java.util.Scanner;

class AreaOfTriangle {
void Triangle()
{
Scanner s= new Scanner(System.in);
System.out.println("Enter the width of the Triangle:");
double b= s.nextDouble();
System.out.println();
System.out.println("Enter the height of the Triangle:");
double h= s.nextDouble();
//Area = (width*height)/2
double area=(b*h)/2;
System.out.println("Area of Triangle is: " + area);
}
}

class AreaOfRectangle extends AreaOfTriangle {
   void Rectangle() {
      Scanner a = new Scanner(System.in);
      System.out.println("Enter the width of the Rectangle:");
      double b1 = a.nextDouble();
      System.out.println();
      System.out.println("Enter the height of the Rectangle:");
      double h1 = a.nextDouble();
      // Area = (width*height)
      double area1 = (b1 * h1);
      System.out.println("Area of Rectangle is: " + area1);
   }

public static void main(String args[])
{
AreaOfRectangle a1 = new AreaOfRectangle();
a1.Triangle();
System.out.println();
a1.Rectangle();
}
}
```

17) Write a program which design Bank Account class as Saving and Current Account and manage information accordingly .

```
class bankAccount {
   private static int nextAccountNumber = 1;
   private String person;
```

```
    private int number;
    private double balance;

    bankAccount(String p, double b) {
       person = p;
       balance = b;
       number = nextAccountNumber;
       nextAccountNumber += 1;
    }

    public int getNumber() {
       return number;
    }

    public String getName() {
       return person;
    }

    public double getBalance() {
       return balance;
    }

    public void deposit(double a) {
       balance += a;
    }
}
```

18) Write a program which design a class name Fan to represent fan properties according to these properties Fan operation will be performed.

```
class Fan {
   public static final int SLOW = 1, MEDIUM = 2, FAST = 3;
   int speed;
   boolean f_on;
   double radius;
   String color;

   Fan() {
      speed = SLOW;
      f_on = false;
      radius = 4;
      color = "blue";
   }

   Fan(int speed, double radius, String color, boolean f_on) {
      this.speed = speed;
      this.radius = radius;
      this.color = color;
```

```
        this.f_on = f_on;
    }

    void display() {
        if (f_on == true) {
            System.out.println("Fan is on \n the speed is =" + speed + "\n the color is =" + color
                    + "\n the radius is =" + radius);
        } else {
            System.out.println("Fan is off \n the color of fan is =" + color + "\n the radius of fan is =" +
radius);
        }
    }

    public static void main(String[] args) {
        Fan obj = new Fan();
        Fan obj1 = new Fan(MEDIUM, 6, "brown", true);
        obj.display();
        obj1.display();
    }
}
```