1. Write a program in java to compute the result of a student where Student is a class having the details of a student(like name, roll, stream) and Marks is a class having the marks of 4 subjects(sub1, sub2, sub3 and sub4). Also print the result as percentage of the marks obtained in all the subjects along with the details of the student.

class Student

{

    String name, stream;

    int roll;

    Student() {

        name = stream = "";

        roll = 0;

    }

    Student(String name, String stream, int roll) {

        this.name = name;

        this.stream = stream;

        this.roll = roll;

    }

    void display() {

        System.out.println("Name: " + name + "\n" + "Stream: " + stream + "\n" + "Roll: " + roll);

    }

}

class Marks extends Student

{

    double sub1, sub2, sub3, sub4;

    Marks() {

        super();

        sub1 = sub2 = sub3 = sub4 = 0;

    }

    Marks(String name, String stream, int roll, double sub1, double sub2, double sub3, double sub4) {

        super(name, stream, roll);

        this.sub1 = sub1;

        this.sub2 = sub2;

        this.sub3 = sub3;

        this.sub4 = sub4;

    }

    void calc() {

        double totalMarks = 400;

        double marksObtained = sub1 + sub2 + sub3 + sub4;

        double percent = (marksObtained / totalMarks) \* 100;

        System.out.println("Percentage: " + percent);

    }

}

class result

{

    public static void main(String[] args) {

        Marks obj = new Marks(args[0], args[1], Integer.parseInt(args[2]), Double.parseDouble(args[3]), Double.parseDouble(args[4]), Double.parseDouble(args[5]), Double.parseDouble(args[6]));

        obj.display();

        obj.calc();

    }

}

OUTPUT:

Microsoft Windows [Version 10.0.19045.3324]

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C:\Users\Anurag Singh>d:

D:\>cd desktop

D:\Desktop>cd java

D:\Desktop\Java>javac sixteen.java

D:\Desktop\Java>java result Anurag CSE 53 78 73 67 84

Name: Anurag

Stream: CSE

Roll: 53

Percentage: 75.5

1. Write a program in java to compute the count of the tiles needed to cover the floor of the room, where there is a Room class having the specification of a room and a Tiles class having the specification of a tile. Also print the count of the tiles if the specification of your room is 120 x 180 x 10 and that of a tile is 12 x 18.

class Room

{

    int length, width, height;

    Room() {

        length = width = height = 0;

    }

    Room(int length, int width, int height) {

        this.length = length;

        this.width = width;

        this.height = height;

    }

}

class Tiles extends Room

{

    int lengthT, widthT;

    Tiles() {

        super();

        lengthT = widthT = 0;

    }

    Tiles(int length, int width, int height, int lengthT, int widthT) {

        super(length, width, height);

        this.lengthT = lengthT;

        this.widthT = widthT;

    }

    void calculate() {

        int tilesRequired = (length \* width) / (lengthT \* widthT);

        System.out.println("Number of Tiles Required: " + tilesRequired);

    }

}

class testTiles

{

    public static void main(String[] args) {

        Tiles obj = new Tiles(120, 180, 10, 12, 18);

        obj.calculate();

    }

}

OUTPUT:

Microsoft Windows [Version 10.0.19045.3324]

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C:\Users\Anurag Singh>d:

D:\>cd desktop

D:\Desktop>cd java

D:\Desktop\Java>javac seventeen.java

D:\Desktop\Java>java testTiles

Number of Tiles Required: 100