Lavanya K S
92132110408

Day 7 ClassWork

1.

```
import java.util.*;
public class Main
{
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		player p = new player();
		String name,country,skill;
		p.name = sc.next();
		p.country =sc.next();
		p.skill=sc.next();
		p.display();
	}
}
class player{
   String name,country,skill;
   void display(){
      System.out.println("Player name: "+name+"\n"+"country: "+country+"\n"+"Skill: " +skill);

   }
}
```

2.

```
import java.util.*;
public class Main
{
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		Main p = new Main();
		char c = sc.next().charAt(0);
		p.isVow(c);



	}
	void isVow(char c){
	   if(c=='a'||c=='e'||c=='i'||c=='o'||c=='u'){
```

```
                System.out.println(c+" is vowel");
            }
            else{
                System.out.println(c+" is consonant");
            }
        }
}
```

3.

```
import java.util.*;
public class Main
{
        public static void main(String[] args) {

                SumClass obj = new SumClass();
                Scanner scan = new Scanner(System.in);
                int n = scan.nextInt();
      int a[] = obj.getData(n);
      int target=scan.nextInt();
            obj.find(a,n,target);

        }

}

class SumClass{

    int[] getData(int n){
        Scanner scan = new Scanner(System.in);
        int a[] = new int[n];
        for(int i=0;i<n;i++){
            a[i]=scan.nextInt();
        }
       return a;
    }

    void find(int a[],int n,int target){
        for(int i=0;i<n;i++){
            for(int j=0;j<n;j++){
                if((a[i]+a[j])==target){
                    System.out.println(a[i]+" "+ a[j]);
                }
            }
```

```
        }
    }

}
```

4.

```
import java.util.*;
public class Main
{
        public static void main(String[] args) {

                SumClass obj = new SumClass();
                Scanner scan = new Scanner(System.in);
                int n = scan.nextInt();
      obj.digitCount(n);

        }

}

class SumClass{
   int n;
   void digitCount(int n){
      int count=0;
      while(n>0){
         int t=n%10;
         n=n/10;
         count++;
      }
      System.out.println(count);
   }
}
```

5.

```
import java.util.*;
public class Main
{
        public static void main(String[] args) {


                Scanner sc = new Scanner(System.in);
                int n = sc.nextInt();
```

```
                TelephoneIndex[] t = new TelephoneIndex[n];

            for(int i=0;i<n;i++){
                String name = sc.next();
                String number = sc.next();
                t[i]=new TelephoneIndex(name,number);
            }

            String search = sc.next();
            for(int i=0;i<n;i++){
              if(t[i].name.contains(search)) {
                  System.out.println(t[i].name+" "+t[i].number);
              }
            }

        }

}
class TelephoneIndex{
    String name;
    String number;
    TelephoneIndex(String name,String number){
        this.name=name;
        this.number=number;
    }
}
```

6.

```
import java.util.*;

class EmailValidation {
    private String email;

    public EmailValidation(String email) {
        this.email = email;
    }

    public boolean checkEmail() {
        if (!email.contains("@") && !email.contains(".")) {
            return false;
        }
        String[] parts = email.split("@");
        if (parts.length != 2) {
```

```
            return false;
        }

        String local = parts[0];
        String domain = parts[1];


        if (local.isEmpty() || domain.isEmpty()) {
            return false;
        }

        String[] validDomains = {"in", "com", "net", "biz"};
        for (String valid : validDomains) {
            if (domain.equals(valid)) {
                return true;
            }
        }

        return true;
    }

    private boolean isValidDomain(String domain, String[] validDomains) {
        for (String validDomain : validDomains) {
            if (domain.equals(validDomain)) {
                return true;
            }
        }
        return false;
    }
}

public class Main{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String email = sc.nextLine();

        EmailValidation em = new EmailValidation(email);
        if (em.checkEmail()) {
            System.out.println("Valid email address: " + email);
        } else {
            System.out.println("Invalid email address: " + email);
        }
    }
}
```

7.

```
import java.util.*;
public class Main
{
	public static void main(String[] args) {


		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();

		Employee[] t = new Employee[n];

	 for(int i=0;i<n;i++){
	     int id= sc.nextInt();
	     String Name=sc.next();
	     double Salary=sc.nextDouble();
	    t[i] = new Employee(id,Name,Salary);

	  }
	  int min=sc.nextInt();
	  int f=0;
	  for(int i=0;i<n;i++){
	     if(t[i].Salary<min){
	        System.out.println(t[i].id+" "+t[i].Name+" "+t[i].Salary);f=1;
	     }

	  }
	  if(f==0){
	     System.out.println("No Employee below minimimum Salary");
	  }



	}

}
class Employee{
   int id;String Name;double Salary;
   Employee(int id,String Name,double Salary){
      this.id = id;
      this.Name=Name;
      this.Salary=Salary;
   }
```

```
}
```

8.

```
import java.util.*;
class Main
{
        public static void main(String[] args) {


                Scanner sc = new Scanner(System.in);
                int n = sc.nextInt();
                User[] t = new User[n];

            for(int i=0;i<n;i++){
                String name = sc.next();
                String mobileNumber = sc.next();
                String Username = sc.next();
                String password = sc.next();
                t[i]=new User(name,mobileNumber,Username,password);
            }


            if(t[0].getmobileNumber().equals(t[1].getmobileNumber())){
                System.out.println("User1 and User2 are equal");

            }
            else{
                System.out.println("User1 and User2 are not equal");
            }

        }

}
class User{
   private String name;
   private String mobileNumber;
   private String Username;
   private String password;
   User(String name,String mobileNumber,String Username,String password){
      this.name=name;
      this.mobileNumber=mobileNumber;
      this.Username=Username;
      this.password=password;
```

```
 }

 public String getName(){
    return name;
 }
 public String getmobileNumber(){
    return mobileNumber;
 }
 public String getUsername(){
    return Username;
 }
 public String getpassword(){
    return password;
 }

 }
```

9.

```
import java.util.*;
public class Main
{
        public static void main(String[] args) {


                Scanner sc = new Scanner(System.in);
                int n = sc.nextInt();

                Student[] t = new Student[n];

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

               int rollno =sc.nextInt();
               int m1=sc.nextInt();
               int m2=sc.nextInt();
               int m3=sc.nextInt();
                  t[i] = new Student(rollno,m1,m2,m3);
            }
            int max1=0,max2=0,max3=0,maxtot=0,i1=0,i2=0,i3=0,ti=0;
            for(int i=0;i<n;i++){

               int tot=t[i].m1+t[i].m2+t[i].m3;
               if(tot>maxtot){
                  maxtot=tot;
                  ti=i;
```

```
            }
            System.out.println(tot);
            if(t[i].m1>max1){
               max1=t[i].m1;
               i1=i;
            }
            if(t[i].m2>max2){
               max2=t[i].m2;
               i2=i;
            }
            if(t[i].m3>max3){
               max1=t[i].m3;
               i3=i;
            }


         }
         System.out.println(t[i1].rollno+" "+t[i1].m1);
                System.out.println(t[i2].rollno+" "+t[i2].m2);
                System.out.println(t[i3].rollno+" "+t[i3].m3);
                System.out.println(t[ti].rollno+" "+maxtot);


      }

}
class Student{
  int rollno,m1,m2,m3;
  Student(int rollno, int m1, int m2, int m3){
     this.rollno=rollno;
     this.m1=m1;
     this.m2=m2;
     this.m3=m3;
  }
 }
```

10.

```
import java.util.*;
class Main
{
        public static void main(String[] args) {
```

```
            Scanner sc = new Scanner(System.in);
            int n = sc.nextInt();
            User[] t = new User[n];

        for(int i=0;i<n;i++){
            String name = sc.next();
            String mobileNumber = sc.next();
            String Username = sc.next();
            String password = sc.next();
            t[i]=new User(name,mobileNumber,Username,password);
        }

        String dlt = sc.next();
        int f=0;
        for(int i=0;i<n;i++){
          if(t[i].getName().equals(dlt)){
              if(i==n-1){
                  t[i] = null;f=1;
              }
              else{
                   t[i]=t[n-1];
                f=1;
              }

          }
        }
        if(f==0){
            System.out.println("User not found");
        }
        else{
            System.out.println("User deleted successfully");
        }

    }

}
class User{
   private String name;
   private String mobileNumber;
   private String Username;
   private String password;
   User(String name,String mobileNumber,String Username,String password){
      this.name=name;
```

```
        this.mobileNumber=mobileNumber;
        this.Username=Username;
        this.password=password;
    }

   public String getName(){
      return name;
   }
   public String getmobileNumber(){
      return mobileNumber;
   }
   public String getUsername(){
      return Username;
   }
   public String getpassword(){
      return password;
   }


}
```

11.

```
import java.util.*;
public class Main
{
        public static void main(String[] args) {
        DateTime dt = new DateTime();
        dt.init();dt.display();
        }
}
class DateTime{
    int hours, minutes, date, month, year;
    void init(){
        Scanner sc = new Scanner(System.in);
        hours=sc.nextInt();
        minutes=sc.nextInt();
        date=sc.nextInt();
        month=sc.nextInt();
        year=sc.nextInt();
    }
    void display(){
        if(hours>24|| minutes>60||date>31||month>12|| (year <0 && year > 9999)){
            System.out.println("Invalid");
```

```
        }
        else{
            System.out.println(date+"-"+month+"-"+year);
            System.out.println(hours+" hrs "+minutes+" mins ");
            System.out.println("Total mins:"+(hours*60 + minutes));
        }
    }
}
```

12.

```
import java.util.*;
public class Main
{
        public static void main(String[] args) {
                Scanner sc = new Scanner(System.in);
                int n = sc.nextInt();
                BusBooking[] obj = new BusBooking[n];
                for(int i=0;i<n;i++){
                    String name = sc.next();
                    String age = sc.next();
                    String gender = sc.next();
                    obj[i] = new BusBooking(name, age, gender);
                }
                String s = sc.next();
                int f =0;
                for(int i=0;i<n;i++){
                    if(obj[i].name.equals(s)){
                        f=1;
                        if(i==n-1){
                            obj[i]=null;
                        }
                        else{
                            obj[i]=obj[n-1];

                        }
                        System.out.println("User details deleted");
                        break;
                    }
                }
                if(f==0){
                    System.out.println("No user matched");
                }else{
                    for(int i=0;i<n-1;i++){
```

```
                        System.out.println(obj[i].name+" "+obj[i].age+" "+obj[i].gender);
                    }
                }

        }
}
class BusBooking{
    String name, age, gender;
    BusBooking(String name, String age, String gender){
        this.name=name;
        this.age=age;
        this.gender=gender;
    }

}
```