import java.util.\*;

class parent

{

protected String name,dob,hobby;

int age,date,month,year;

Scanner s=new Scanner(System.in);

ArrayList<String> al1 = new ArrayList<String>();

ArrayList<String> al = new ArrayList<String>();

public parent()

{

System.out.println("\nEnter the father name : ");

name=s.next();

System.out.println("\nEnter the father dob(dd/mm/yyyy) : ");

dob=s.next();

System.out.println("\nEnter the father hobby : ");

//hobby=s.next();

{

int i=0;

System.out.println("\nenter the total number of hobbies\n");

int n=s.nextInt();

while(i<n)

{

String d=s.next();

al1.add(d);

i++;

}//while close

System.out.println("\nthehobbies are:\n");

System.out.println(al1);

}

String[] str1=dob.split("/");

date=Integer.parseInt(str1[0]);

month=Integer.parseInt(str1[1]);

year=Integer.parseInt(str1[2]);

}

public void calculate()

{

int tdate,tmonth,tyear;

Calendar calendar=Calendar.getInstance();

tdate=calendar.get(Calendar.DATE);

tyear=calendar.get(Calendar.YEAR);

tmonth=calendar.get(Calendar.MONTH)+1;

int flag=0;

if(tmonth>=month)

{

if(tmonth==month)

{

if(tdate>=date)

flag=1;

}

else

flag=1;

}

if(flag==1)

age=tyear-year;

else

age=tyear-year-1;

}

public void display()

{

System.out.println("\nNAME \t\t: "+name);

System.out.println("\nDOB \t\t: "+dob);

System.out.println("\nHOBBY \t\t: "+al1);

System.out.println("\nAGE \t\t:"+age+" years");

}

//s.close();

}

class child extends parent

{

protected String name,dob,hobby;

int age,date,month,year;

//ArrayList<String> al=new ArrayList<String>();

Scanner s1=new Scanner(System.in);

public child()

{

super();

System.out.println("\nEnter the son name : ");

name=s1.next();

System.out.println("\nEnter the son dob (dd/mm/yyyy): ");

dob=s1.next();

System.out.println("\nEnter the son hobby : ");

{

int i=0;

System.out.println("\nenter the total number of hobbies\n");

int n=s1.nextInt();

while(i<n)

{

String c=s1.next();

al.add(c);

i++;

}//while close

System.out.println("\nthehobbies are:\n");

System.out.println(al);

}

//hobby=s1.next();

String[] str1=dob.split("/");

//System.out.println("\n"+str1);

date=Integer.parseInt(str1[0]);

month=Integer.parseInt(str1[1]);

year=Integer.parseInt(str1[2]);

}

public void calculate()

{

int tdate,tmonth,tyear;

super.calculate();

Calendar calendar = Calendar.getInstance();

tdate=calendar.get(Calendar.DATE);

tyear=calendar.get(Calendar.YEAR);

tmonth=calendar.get(Calendar.MONTH)+1;

int flag=0;

if(tmonth>=month)

{

if(tdate>=date)

flag=1;

}

if(flag==1)

age=tyear-year;

else

age=tyear-year-1;

}

public void agediff()

{

int temp=super.age-age;

System.out.println("The diffenence in age of father and sun is " +temp);

System.out.println("\n are the hobbies matching?\n");

String p=al.get(0);

if(al1.contains(p))

{

System.out.println("\nhobbies are matching");

}

else

System.out.println("\nhobbies not matching");

}

public void display()

{

super.display();

System.out.println("\nNAME \t\t: "+name);

System.out.println("\nDOB \t\t: "+dob);

System.out.println("\nHOBBY \t\t: "+al);

System.out.println("\nAGE \t\t:"+age);

}

//s.close();

}

public class hierarchymine11{

public static void main(String[] arg)

{

int choice ;

Scanner s5=new Scanner(System.in);

child c=new child();

System.out.println("calculating age ");

c.calculate();

c.display();

System.out.println("calculating difference in age ");

c.agediff();

}

}

SAMPLE INPUT AND OUTPUT:

C:\java>java hierarchymine11

Enter the father name :

arjun

Enter the father dob(dd/mm/yyyy) :

21/2/1964

Enter the father hobby :

enter the total number of hobbies

1

reading

thehobbies are:

[reading]

Enter the son name :

john

Enter the son dob (dd/mm/yyyy):

11/2/1986

Enter the son hobby :

enter the total number of hobbies

1

drawing

thehobbies are:

[drawing]

calculating age

NAME : arjun

DOB : 21/2/1964

HOBBY : [reading]

AGE :49 years

NAME : john

DOB : 11/2/1986

HOBBY : [drawing]

AGE :27

calculating difference in age

The diffenence in age of father and sun is 22

are the hobbies matching?

hobbies not matching