***==================================================***

***Dt : 24/8/2022***

***Assignment:(Solution)***

***Update Student program as follows:***

***Display result based on percentage***

***per>=70 && per<=100 ===> Distinction***

***per>=60 && per<70 ===> FirstClass***

***per>=50 && per<60 ===> SecondClass***

***per>=35 && per<50 ===> ThirdClass***

***else ===> Fail***

***Note:***

***=>If any sub marks are in b/w 0 to 34,then display the result***

***as "Fail".***

***Ex : DemoMethods9.java***

***import java.util.Scanner;***

***class CheckBranch***

***{***

***boolean verify(String br)***

***{***

***return switch(br)***

***{***

***case "cse" : yield true;***

***case "ece" : yield true;***

***case "eee" : yield true;***

***default : yield false;***

***};***

***}***

***}***

***class TotalMarks //SubClass***

***{***

***int calculate(int s1,int s2,int s3,int s4,int s5,int s6)***

***{***

***return s1+s2+s3+s4+s5+s6;***

***}***

***}***

***class Percentage //SubClass***

***{***

***float generate(int totMarks)***

***{***

***return (float)totMarks/6;***

***}***

***}***

***class StudentResult //SubClass***

***{***

***String generate(float per,boolean p)***

***{***

***if(p)***

***{***

***return "Fail";***

***}***

***else if(per>=70 && per<=100)***

***{***

***return "Distinction";***

***}***

***else if(per>=60 && per<70)***

***{***

***return "FirstClass";***

***}***

***else if(per>=50 && per<60)***

***{***

***return "SecondClass";***

***}***

***else if(per>=35 && per<50)***

***{***

***return "ThirdClass";***

***}***

***else***

***{***

***return "Fail";***

***}***

***}***

***}***

***class DemoMethods9//MainClass***

***{***

***public static void main(String[] args)***

***{***

***Scanner s = new Scanner(System.in);***

***System.out.println("Enter the rollNo:");***

***String rollNo = s.nextLine();***

***int len = rollNo.length();***

***if(len==10)***

***{***

***System.out.println("Enter the name:");***

***String name = s.nextLine();***

***System.out.println("Enter the branch:");***

***String br = s.nextLine();***

***CheckBranch cb = new CheckBranch();***

***boolean k = cb.verify(br);***

***if(k)***

***{***

***System.out.println("Enter the marks of subject-1:");***

***int s1 = s.nextInt();***

***System.out.println("Enter the marks of subject-2:");***

***int s2 = s.nextInt();***

***System.out.println("Enter the marks of subject-3:");***

***int s3 = s.nextInt();***

***System.out.println("Enter the marks of subject-4:");***

***int s4 = s.nextInt();***

***System.out.println("Enter the marks of subject-5:");***

***int s5 = s.nextInt();***

***System.out.println("Enter the marks of subject-6:");***

***int s6 = s.nextInt();***

***boolean p=false;***

***if((s1>=0 && s1<=100) && (s2>=0 && s2<=100) && (s3>=0 && s3<=100)***

***&& (s4>=0 && s4<=100) && (s5>=0 && s5<=100) &&***

***(s6>=0 && s6<=100))***

***{***

***if(s1<=34 || s2<=34 || s3<=34 || s4<=34 ||***

***s5<=34 || s6<=34)//simple Nested if***

***{***

***p=true;***

***}//end of if***

***TotalMarks tm = new TotalMarks();***

***int totMarks = tm.calculate(s1,s2,s3,s4,s5,s6);***

***Percentage pr = new Percentage();***

***float per = pr.generate(totMarks);***

***StudentResult sr = new StudentResult();***

***String result = sr.generate(per,p);***

***System.out.println("=====Details====");***

***System.out.println("RollNo:"+rollNo);***

***System.out.println("Name:"+name);***

***System.out.println("Branch:"+br);***

***System.out.println("TotMarks:"+totMarks);***

***System.out.println("Percentage:"+per);***

***System.out.println("Result:"+result);***

***}//end of if***

***else***

***{***

***System.out.println("Invalid Marks...");***

***}***

***}//end of if***

***else***

***{***

***System.out.println("Invalid branch...");***

***}***

***}//end of if***

***else***

***{***

***System.out.println("Invalid rollNo...");***

***}***

***}***

***}***

***============================================================***

***\*imp***

***Referential DataTypes as parameters and return type:***

***=>we can also pass Referential datatypes as parameter to***

***methods and we can also have referential datatypes as return***

***type from methods.***

***Ex : DemoMethods10.java***

***import java.util.Scanner;***

***class UserDetails //SubClass***

***{***

***//Instance Variables memory in Object***

***String uName,pWord,fName,lName,addr,mId;***

***long phNo;***

***}***

***class UserRegistration //SubClass***

***{***

***UserDetails register(Scanner s)***

***{***

***UserDetails ud = new UserDetails();***

***System.out.println("Enter the UserName:");***

***ud.uName = s.nextLine();***

***System.out.println("Enter the PassWord:");***

***ud.pWord = s.nextLine();***

***System.out.println("Enter the FirstName:");***

***ud.fName = s.nextLine();***

***System.out.println("Enter the LastName:");***

***ud.lName = s.nextLine();***

***System.out.println("Enter the Address:");***

***ud.addr = s.nextLine();***

***System.out.println("Enter the MailId:");***

***ud.mId = s.nextLine();***

***System.out.println("Enter the PhoneNo:");***

***ud.phNo = s.nextLong();***

***return ud;***

***}***

***}***

***class DisplayUserDetails //SubClass***

***{***

***void display(UserDetails ud)***

***{***

***System.out.println("======UserDetails=====");***

***System.out.println("UserName:"+ud.uName);***

***System.out.println("PassWord:"+ud.pWord);***

***System.out.println("FirstName:"+ud.fName);***

***System.out.println("LastName:"+ud.lName);***

***System.out.println("Address:"+ud.addr);***

***System.out.println("MailId:"+ud.mId);***

***System.out.println("PhoneNo:"+ud.phNo);***

***}***

***}***

***class DemoMethods10 //MainClass***

***{***

***public static void main(String[] args)***

***{***

***Scanner s = new Scanner(System.in);***

***UserRegistration ur = new UserRegistration();***

***UserDetails ud = ur.register(s);***

***DisplayUserDetails dud = new DisplayUserDetails();***

***dud.display(ud);***

***}***

***}***

***o/p:***

***Enter the UserName:***

***nit.v***

***Enter the PassWord:***

***mzu672***

***Enter the FirstName:***

***Venkat***

***Enter the LastName:***

***M***

***Enter the Address:***

***SrNagar***

***Enter the MailId:***

***v@gmail.com***

***Enter the PhoneNo:***

***9898981234***

***======UserDetails=====***

***UserName:nit.v***

***PassWord:mzu672***

***FirstName:Venkat***

***LastName:M***

***Address:SrNagar***

***MailId:v@gmail.com***

***PhoneNo:9898981234***

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