***Dt : 25/8/2022***

***Assignment:(Solution with Updation)***

***Update Student program by displaying result as "fail" when any***

***sub marks entered in b/w 0 to 34.***

***Ex : DemoMethods5.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***

***{***

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

***{***

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

***}***

***}***

***class Percentage***

***{***

***float calculate(int totMarks)***

***{***

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

***}***

***}***

***class SResult***

***{***

***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 DemoMethods5 //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 StudentName:");***

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

***System.out.println("Enter the Branch(CSE/ECE/EEE):");***

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

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

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

***if(k)***

***{***

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

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

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

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

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

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

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

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

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

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

***System.out.println("Enter the marks of sub-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;***

***}***

***TotalMarks ob1 = new TotalMarks();***

***int totM = ob1.add(s1,s2,s3,s4,s5,s6);***

***Percentage ob2 = new Percentage();***

***float per = ob2.calculate(totM);***

***SResult sr = new SResult();***

***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("TotalMarks:"+totM);***

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

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

***}***

***else***

***{***

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

***}***

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

***else***

***{***

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

***}***

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

***else***

***{***

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

***}***

***}***

***}***

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

***faq:***

***define switch-case statement?***

***=>switch-case statement is used to select one from multiple***

***options or cases.***

***syntax:***

***switch(value)***

***{***

***case 1 : statements;***

***break;***

***case 2 : statements;***

***break;***

***.***

***case n : statements;***

***break;***

***default : default\_statements;***

***}***

***behaviour:***

***=>The switch-value is compared with available options or cases,***

***if the switch-value is matched with available options then the***

***statements under the option are executed.***

***=>we use 'break' statement to stop the switch-case execution***

***after executing the statements under the case.***

***=>If the switch-value is not matched with available cases then***

***the default is executed.***

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

***\*imp***

***define switch-case-yield statement?***

***=>switch-case-yield statement is introduced by Java13 version***

***and which is used to return the result.***

***=>This switch-case-yield statement is also known as return\_type***

***switch.***

***syntax:***

***return switch(value)***

***{***

***case 1 : yield result;***

***case 2 : yield result;***

***.***

***case n : yield result;***

***default : yield default\_value;***

***};***

***Note:***

***=>In switch-case-yield statement 'default' is manditory.***

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

***\*imp***

***Referential DataTypes as parameter and return\_type:***

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

***methods,in this process the object references are moved from***

***one method to another method.***

***Ex-program : DemoMethods6.java***

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

***class UserDetails //SubClass***

***{***

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

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

***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 FisrtName:");***

***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.mailId = 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.mailId);***

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

***}***

***}***

***class DemoMethods6 //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 FisrtName:***

***Raj***

***Enter the LastName:***

***Kumar***

***Enter the address:***

***SrNagar***

***Enter the MailId:***

***raj@gmail.com***

***Enter the PhoneNo:***

***9898981234***

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

***UserName:nit.v***

***PassWord:mzu672***

***FirstName:Raj***

***LastName:Kumar***

***Address:SrNagar***

***MailId:raj@gmail.com***

***PhoneNo:9898981234***

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