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LAB PROGRAM-2

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ALGORITHM:-

STEP:1:- START.

STEP:2:- import java.util.* package created along with class Student.

STEP:3:- Required variables & array created.

STEP:4:- void read-data() method created to read name, USN & Credits & marks of the student.

STEP:5:- void calc-SGPA() method created so as to calculate the SGPA of 5 subjects according to the marks and grade points of every subject.

STEP:6:- SGPA after calculation is printed.

STEP:7:- Creation of void details() method to display all the requirements on the screen i.e. Name, USN, MARKS, Credits & SGPA of a student.

STEP:8:- Now, main method() is created and an object ob is created.

STEP:9:- The object ob calls all the three methods i.e. ob.read-data(), ob.calc-SGPA(), ob.details() and performs the requirements.

STEP:10:- Close of main() method along with the close of class Student.

STEP:11:- STOP.

import java.util.*;
public class Student
{

String name;

String USN;

int marks[] = new int[5];

int credits[] = new int[5];

int tot = 0;

int i = 0;

int grade = 0;

void read-data()

{

Scanner obj = new Scanner(System.in);

S.O.pln("ENTER THE NAME OF THE STUDENT:\n");

name = obj.next();

S.O.pln("ENTER THE USN:\n");

USN = obj.next();

S.O.pln("ENTER THE CREDITS AND MARKS FOR 5 SUBJECTS:\n");

for (i = 0; i < 5; i++)
{

S.O.pln("CREDITS FOR SUBJECT" + (i+1) + " : ");

credits[i] = obj.nextInt();

S.O.pln("\n MARKS FOR SUBJECT" + (i+1) + " : ");

marks[i] = obj.nextInt();

}

}

void calc-SGPA()

{

for (i = 0; i < 5; i++)


```

{
    if (marks[i] >= 90 && marks[i] < 100)
        grade = 10;
    else if (marks[i] >= 75 && marks[i] < 90)
        grade = 9;
    else if (marks[i] >= 60 && marks[i] < 75)
        grade = 8;
    else if (marks[i] >= 50 && marks[i] < 60)
        grade = 7;
    else if (marks[i] >= 45 && marks[i] < 50)
        grade = 5;
    else if (marks[i] < 40)
        grade = 0;
    tot = tot + grade * credits[i];
}
tot = tot / 20;
s.o.pln("Total SGPA : " + tot);
}

void details()
{
    s.o.pln("NAME : " + name);
    s.o.pln("USN : " + USN);
    s.o.pln("MARKS and CREDITS OF ALL 5 SUBJECTS:");
    for (i = 0; i < 5; i++)
    {
        s.o.p(marks[i] + "\t");
        s.o.pln(credits[i]);
    }

    cal - SGPA();
}

```



```
public static void main (String args [])  
{
```

```
    Student ob = new Student ();
```

```
    ob.read-data();
```

```
    ob.calc - SGPA();
```

```
    ob.details();
```

```
}
```

```
}
```