

Q) Develop a Java program to create a class Student with members: USN, Name, an array Credits and an array marks. Include methods to accept & display details and a method to calculate CGPA of Student.

A) import java.util.Scanner;

class Student{

String USN, name;

int[] marks = new int[3];

Double result = 0.0;

int[] credits = new int[3], int total = 0;

void accept(){}

Scanner s = new Scanner(System.in);

System.out.println("Enter USN");

USN = s.nextLine();

System.out.println("Enter name");

Name = s.nextLine();

System.out.println("Enter marks in 3 subjects");

for( int i=0 ; i<3 ; i++ )

{ marks[i] = s.nextInt(); }

}

System.out.println("Enter credits of 3 subjects");

for( int i=0 ; i<3 ; i++ )

{

credits[i] = s.nextInt();

}

System.out.println("Total marks and credits entered");

void calculate()

{

for( int i=0 ; i<3 ; i++ )

{

if( marks[i] >= 90 )

result += 10.0;

if( marks[i] >= 80 )

result += 9.0;

if( marks[i] >= 70 )

result += 6.0;

if( marks[i] >= 60 )

result += 5.0;

if( marks[i] >= 50 )

result += 4.0;

else

result += 3.0;

for( int i=0 ; i<3 ; i++ )

total += marks[i];

result = result / total;

void display()

{

System.out.println("USN : " + USN);

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

Q) Develop a Java program to create a class Student with members - USN, Name, marks in three subjects and average marks. Include methods to accept & display details and a method to calculate CGPA of Student.

A)

```
import java.util.Scanner;  
class Student{  
    String USN, name;  
    int[] marks = new int[3]; // for marks in 3 subjects  
    Double result = 0.0;  
    int[] credits = new int[3]; int totCrdt = 0;  
    void accept(){  
        Scanner s = new Scanner(System.in);  
        System.out.println("Enter USN");  
        USN = s.nextLine();  
        System.out.println("Enter name");  
        name = s.nextLine();  
        System.out.println("Enter marks in 3 subjects");  
        for(int i=0; i<3; i++)  
        {  
            marks[i] = s.nextInt();  
        }  
        System.out.println("Enter credits of 3 subjects");  
        for(int i=0; i<3; i++)  
        {  
            credits[i] = s.nextInt();  
        }  
    }  
}
```

as a class student  
apart & displays  
data saying student

void display()

void calculate()

{

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

{

if (marks[i] >= 90 & & marks[i] <= 100)  
result += 10 \* credits[i];

if (marks[i] >= 80 & & marks[i] < 90)  
result += 9 \* credits[i];

if (marks[i] >= 70 & & marks[i] < 80)  
result += 8 \* credits[i];

if (marks[i] >= 60 & & marks[i] < 70)  
result += 7 \* credits[i];

if (marks[i] >= 50 & & marks[i] < 60)  
result += 6 \* credits[i];

if (marks[i] >= 40 & & marks[i] < 50)  
result += 5 \* credits[i];

else result += 0 \* credits[i];

}

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

total += credits[i];

result = result / total;

}

void display()

{

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

System.out.println("Credits Marks: ");

```

for (int i = 0; i < n; i++)
    System.out.println("Credit[" + i + "] = " + marks[i]);
System.out.println("Total credit = " + total);
System.out.println("GPA = " + result);
}
}

class StudentGPA
{
public static void main (String [] args)
{
    Student s1 = new Student();
    s1.accept();
    s1.calculate();
    s1.display();
}
}

```

OUTPUT

ENTER USN:

1Bm21C5060

ENTER NAME

Awoiz

Enter marks in 3 subjects

40

80

100

end credits for 3 subjects

4 of written test marks [ 40% + 40% + 40% ]  
3 of written + viva marks [ 30% + 30% + 30% ]  
total marks [ 100% ]

Name: Awoiz USN: 1Bmg1CS060

Credit	Marks
4	90
4	80
3	100

total Credits = 10

script: a.7

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C:\Users\BMSCE\Desktop\1BM21CS060>java Studentsgpa

Enter Usn

1BM21CS060

Enter name

AWAIZ

Enter marks in 3 subjects

90

80

100

enter credits for 3 subjects

4

3

3

Name: AWAIZ Usn: 1BM21CS060

credits marks

4 90

3 80

3 100

total credits=10

SGPA=9.7