

Q) Develop a program to create a class Student with member VSN, name, an array credits and an array marks. Include methods to accept & display details and a method to calculate SGPA of a student

```
=> public class Something {  
    import java.util.*;  
    private static class Student {  
        String name;  
        String VSN;  
        int[] marks = new int[8];  
        int[] credits = new int[8];  
        double sgpa sgpa = 10;  
        Student(String name, String VSN) {  
            this.name = name;  
            this.VSN = VSN;  
        }  
    }  
}
```

```
void Display() {  
    System.out.println("The SGPA acquired is : " + this.sgpa);  
}  
  
}
```

```
private static void SGPA(Student s) {  
    int n = s.marks.length; int tc = 0;  
    for(int i = 0; i < n; i++) tc += s.credits[i];  
    for(int i = 0; i < n; i++) {  
        if(s.marks[i] >= 90 && s.marks[i] <= 100)  
            s.sgpa += s.credits[i] * 4;  
        else if(s.marks[i] >= 80)  
            s.sgpa += s.credits[i] * 3;  
        else if(s.marks[i] >= 70)  
            s.sgpa += s.credits[i] * 2;  
        else if(s.marks[i] >= 60)  
            s.sgpa += s.credits[i] * 1;  
    }  
    s.sgpa = s.sgpa / tc;  
}
```

```
else if (s.marks[i] >= 50)
```

```
s.sgpa -= s.credits[i] * 4 / tc;
```

```
else
```

```
s.sgpa -= s.credits[i] * 5 / tc;
```

```
}
```

```
}
```

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

```
Scanner sc = new Scanner (System.in);
```

```
Student s1 = new Student("IDK", "IBM21CS111");
```

```
for (int i = 0; i < s1.marks.length; i++) {
```

```
System.out.print("Enter marks of "+ i + "th Subject : ");
```

```
s1.marks[i] = sc.nextInt();
```

```
System.out.print("Enter associated credit: ");
```

```
s1.credits[i] = sc.nextInt();
```

```
}
```

```
SGPA(s1);
```

```
System.out.println("Name: " + s1.name + "\n USN: " + s1.usn);
```

```
s1.Display();
```

```
}
```

```
}
```

15.10
Write output