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005 LAB-4  
DI BATCH

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Develop a Java program to create a class student with members usn, name, an array, credit and an array marks. Include methods to accept and display details and a method to calculate SGPA of a student.

```
import java.util.*;
```

```
class student {
```

```
    String name;
```

```
    String usn;
```

```
    int marks[] = new int[5];
```

```
    int credit[] = new int[5];
```

```
    int tot = 0;
```

```
    int i;
```

```
    int grade = 0;
```

```
    void read_data()
```

```
{
```

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

```
    System.out.println("Enter the name of the  
                        student");
```

```
    name = obj.next();
```

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

```
    name usn = obj.next();
```

```
system.out.println("Enter the credit and marks  
for 5 subjects");
```

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

```
{
```

```
system.out.println("Credit for subject" + (i+1) + ":");
```

```
credit[i] = obj.nextInt();
```

```
system.out.println("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 = 6;
```

```
else if (marks[i] >= 40 && marks[i] < 45)
```

```
grade = 5;
```

```
else if (marks[i] < 40)
    grade = 0;
```

```
tot = tot + grade * credits[i];
```

```
}
```

```
tot = tot / 20;
```

```
System.out.println("GPA: " + tot);
```

```
}
```

```
void details()
```

```
{
```

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

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

```
System.out.println("Marks and credits  
for all 5 subjects:");
```

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

```
{
```

```
System.out.println(marks[i]);
```

```
System.out.println(credits[i]);
```

```
}
```

```
calc_GPA();
```

```
}
```

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

```
{
```

```
student obj = new student();
```

```
obj.read_data();
```

```
obj.calc_GPA();
```

```
obj.details();
```

```
} }
```