

```
import java.util.Scanner;
```

```
class Student1{
```

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

```
    String USN;
```

```
    String Name;
```

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

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

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

```
    float SGPA;
```

```
    int totalCredits = 0;
```

```
    void getDetails(){
```

```
        System.out.println("Enter student USN: ");
```

```
        USN = sc.nextLine();
```

```
        System.out.println("Enter student Name: ");
```

```
        Name = sc.nextLine();
```

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

```
            System.out.println("Enter CREDITS for Subject " + (i+1) + ": ");
```

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

```
            totalCredits += credits[i];
```

```
            System.out.println("Enter MARKS for Subject " + (i+1) + ": ");
```

```
            marks[i] = sc.nextFloat();
```

```
        }
```

```
    }
```

```
    void showDetails(){
```

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

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

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

```
            System.out.println("Subject " + (i+1) + " - Credits: " + credits[i] + " - Marks: " + marks[i]);
```

```
        }
```

```
        System.out.println("SGPA of " + Name + " is: " + (float)(SGPA/totalCredits));
```

```
    }
```

```
void showDetails(){
    System.out.println("Student USN: " + USN);
    System.out.println("Enter student name: " + Name);
    for(int i=0;i<5;i++){
        System.out.println("Subject " + (i+1) + " - Credits: " + credits[i] + " - Marks: " + marks[i]);
    }
    System.out.println("SGPA of " + Name + " is: " + (float)(SGPA/totalCredits));
}
```

```
void calcSGPA(){

    for(int i = 0;i<5;i++){
        if(marks[i] > 100){
            System.out.println("Error: Marks are above 100");
            return;
        }else if(marks[i] >= 90){
            points[i] = 10;
        }else if(marks[i] >= 80){
            points[i] = 9;
        }else if(marks[i] >= 70){
            points[i] = 8;
        }else if(marks[i] >= 60){
            points[i] = 7;
        }else if(marks[i] >= 50){
            points[i] = 5;
        }else if(marks[i] >= 40){
            points[i] = 4;
        }else{
            points[i] = 0;
        }

        SGPA += (points[i]*credits[i]);
    }
}
```

```
    }  
    }  
  
public class Student {  
    public static void main(String args[]) {  
        Student1 stu1 = new Student1();  
        stu1.getDetails();  
        stu1.calcSGPA();  
        stu1.showDetails();  
    }  
}
```

Command Prompt
Microsoft Windows [Version 10.0.19041.508]
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C:\Users\Jelani>cd java

C:\Users\Jelani\java>java Student

Enter student USN:

1bm18cs132

Enter student Name:

Ubaid

Enter CREDITS for Subject 1:

5

Enter MARKS for Subject 1:

60

Enter CREDITS for Subject 2:

4

Enter MARKS for Subject 2:

78

Enter CREDITS for Subject 3:

4

Enter MARKS for Subject 3:

76

Enter CREDITS for Subject 4:

4

Enter MARKS for Subject 4:

56

Enter CREDITS for Subject 5:

3

Enter MARKS for Subject 5:

80

Student USN: 1bm18cs132

Enter student name: Ubaid

Subject 1 - Credits: 5 - Marks: 60.0

Subject 2 - Credits: 4 - Marks: 78.0

Subject 3 - Credits: 4 - Marks: 76.0

Subject 4 - Credits: 4 - Marks: 56.0

Subject 5 - Credits: 3 - Marks: 80.0

SGPA of Ubaid is: 7.3