

Input	Expected Output	Actual Output	Pass?
id: 1547 class GPA:4 class credits: 3 overall GPA: 3.5 overall credits: 9	STUDENT DATA: Student ID: 1547 Current class GPA: 4.000 Current class credits: 3 Overall GPA: 3.500 Overall credits: 9 NEW GPA: 3.625	STUDENT DATA: Student ID: 1547 Current class GPA: 4.000 Current class credits: 3 Overall GPA: 3.500 Overall credits: 9 NEW GPA: 3.625	yes
id: 6543 class GPA:3.5 class credits: 3 overall GPA: 4.0 overall credits: 12	STUDENT DATA: Student ID: 6543 Current class GPA: 3.500 Current class credits: 3 Overall GPA: 4.000 Overall credits: 12 NEW GPA: 3.900	STUDENT DATA: Student ID: 6543 Current class GPA: 3.500 Current class credits: 3 Overall GPA: 4.000 Overall credits: 12 NEW GPA: 3.900	yes
id: 6487 class GPA:0 class credits: 3 overall GPA: 4 overall credits: 6	STUDENT DATA: Student ID: 6487 Current class GPA: 0.000 Current class credits: 3 Overall GPA: 4.000 Overall credits: 6 NEW GPA: 2.667	STUDENT DATA: Student ID: 6487 Current class GPA: 0.000 Current class credits: 3 Overall GPA: 4.000 Overall credits: 6 NEW GPA: 2.667	yes

Test Case 1:

```

1 //
2 // Name: Miller, Raymond
3 // Class/Section: CSCI 341/000A
4 // Date: 05/01/2021
5 //
6 package com.miller.milleraymond_avg1;
7
8 import java.util.Scanner;
9
10 /**
11  *
12  * @author Miller
13  */
14 public class MillerRaymond_avg1 {
15     public static void main(String[] args) {
16         // declare variables
17         int student_id;
18         double curr_gpa;
19         int curr_creds;
20         double ovr_gpa;
21         int ovr_creds;
22         double new_gpa;
23
24         // initialize variables with user input
25         try (Scanner sc = new Scanner(System.in)) {
26             System.out.print("Enter student ID: ");
27             student_id = sc.nextInt();
28             System.out.print("Enter current class grade in GPA format: ");
29             curr_gpa = sc.nextDouble();
30             System.out.print("Enter current class number of credits: ");
31             curr_creds = sc.nextInt();
32             System.out.print("Enter overall GPA: ");
33             ovr_gpa = sc.nextDouble();
34             System.out.print("Enter overall number of credits: ");
35             ovr_creds = sc.nextInt();
36         }
37         // calculate new gpa
38         new_gpa = ((curr_gpa * curr_creds) + (ovr_gpa * ovr_creds)) / (curr_creds + ovr_creds);
39
40         // display output
41         System.out.printf("Student ID: %d\n", student_id);
42         System.out.printf("Current class GPA: %.3f\n", curr_gpa);
43         System.out.printf("Current class credits: %d\n", curr_creds);
44         System.out.printf("Overall GPA: %.3f\n", ovr_gpa);
45         System.out.printf("Overall credits: %d\n", ovr_creds);
46         System.out.printf("New GPA: %.3f\n", new_gpa);
47     }
48 }

```

Console Output:

```

> java -cp src/main/java/com/miller/milleraymond_avg1/src/main/java/com/miller/milleraymond_avg1/MillerRaymond_avg1.jar
Enter student ID: 1547
Enter current class grade in GPA format: 4
Enter current class number of credits: 3
Enter overall GPA: 3.5
Enter overall number of credits: 9

Student Data:
Student ID: 1547
Current class GPA: 4.000
Current class credits: 3
Overall GPA: 3.500
Overall credits: 9
New GPA: 3.625

```

Test Case 2

```
1 //
2 // Name: Miller, Raymond
3 // Class/Section: CSCI 141/0008
4 // Date: 08/01/2021
5 //
6 package com.miller.milleraymore_agnt1;
7
8 import java.util.Scanner;
9
10 /**
11  *
12  * @author Miller
13  */
14 public class MillerRaymore_Agnt1 {
15     public static void main(String[] args) {
16         // Define variables
17         int student_id;
18         double curr_gpa;
19         int curr_creds;
20         double over_gpa;
21         int over_creds;
22         double new_gpa;
23         // Initialize variables with user input
24         try { Scanner sc = new Scanner(System.in); {
25             System.out.print("Enter student ID: ");
26             student_id = sc.nextInt();
27             System.out.print("Enter current class grade in GPA format: ");
28             curr_gpa = sc.nextDouble();
29             System.out.print("Enter current class number of credits: ");
30             curr_creds = sc.nextInt();
31             System.out.print("Enter overall GPA: ");
32             over_gpa = sc.nextDouble();
33             System.out.print("Enter overall number of credits: ");
34             over_creds = sc.nextInt();
35         }
36         // calculate new gpa
37         new_gpa = ((curr_gpa * curr_creds) + (over_gpa * over_creds))
38             / (curr_creds + over_creds);
39         // display output
40         System.out.println("STUDENT DATA:");
41         System.out.print("Student ID: %d\n", student_id);
42         System.out.print("Current class GPA: %.3f\n", curr_gpa);
43         System.out.print("Current class credits: %d\n", curr_creds);
44         System.out.print("Overall GPA: %.3f\n", over_gpa);
45         System.out.print("Overall credits: %d\n", over_creds);
46         System.out.print("New GPA: %.3f\n", new_gpa);
47     }
48 }
```

Console Shell

```
> java csci141/Week1/MillerRaymore_Agnt1/src/main/java/com/miller/milleraymore_agnt1/MillerRaymore_Agnt1.java
Enter student ID: 455
Enter current class grade in GPA format: 3.5
Enter current class number of credits: 3
Enter overall GPA: 4.0
Enter overall number of credits: 12
STUDENT DATA:
Student ID: 455
Current class GPA: 3.500
Current class credits: 3
Overall GPA: 4.000
Overall credits: 12
New GPA: 3.900
```

Test Case 3

```
1 //
2 // Name: Miller, Raymond
3 // Class/Section: CSCI 141/0008
4 // Date: 08/01/2021
5 //
6 package com.miller.milleraymore_agnt1;
7
8 import java.util.Scanner;
9
10 /**
11  *
12  * @author Miller
13  */
14 public class MillerRaymore_Agnt1 {
15     public static void main(String[] args) {
16         // Define variables
17         int student_id;
18         double curr_gpa;
19         int curr_creds;
20         double over_gpa;
21         int over_creds;
22         double new_gpa;
23         // Initialize variables with user input
24         try { Scanner sc = new Scanner(System.in); {
25             System.out.print("Enter student ID: ");
26             student_id = sc.nextInt();
27             System.out.print("Enter current class grade in GPA format: ");
28             curr_gpa = sc.nextDouble();
29             System.out.print("Enter current class number of credits: ");
30             curr_creds = sc.nextInt();
31             System.out.print("Enter overall GPA: ");
32             over_gpa = sc.nextDouble();
33             System.out.print("Enter overall number of credits: ");
34             over_creds = sc.nextInt();
35         }
36         // calculate new gpa
37         new_gpa = ((curr_gpa * curr_creds) + (over_gpa * over_creds))
38             / (curr_creds + over_creds);
39         // display output
40         System.out.println("STUDENT DATA:");
41         System.out.print("Student ID: %d\n", student_id);
42         System.out.print("Current class GPA: %.3f\n", curr_gpa);
43         System.out.print("Current class credits: %d\n", curr_creds);
44         System.out.print("Overall GPA: %.3f\n", over_gpa);
45         System.out.print("Overall credits: %d\n", over_creds);
46         System.out.print("New GPA: %.3f\n", new_gpa);
47     }
48 }
```

Console Shell

```
> java csci141/Week1/MillerRaymore_Agnt1/src/main/java/com/miller/milleraymore_agnt1/MillerRaymore_Agnt1.java
Enter student ID: 4497
Enter current class grade in GPA format: 0
Enter current class number of credits: 3
Enter overall GPA: 4.0
Enter overall number of credits: 4
STUDENT DATA:
Student ID: 4497
Current class GPA: 0.000
Current class credits: 3
Overall GPA: 4.000
Overall credits: 4
New GPA: 2.667
```