



Introduction to Programming

Create a python program to calculate the weighted total of MAD 102 course. **You'll have to decide what user inputs are you taking, then document them accordingly with comments.** The expected output is an average of the grades per category, and a final overall grade. The goal is to have this program minimize the user's effort to calculate the weighted total. **Also, consider the user will enter proper input and use the program correctly.**

Do not forget to include comments that state the author, the date the program was created, and the purpose of the program. Additionally, add comments throughout describing the various steps.

Course Breakdown:

Test 1 is worth 20%

Test 2 is worth 20%

Test 3 is worth 20 %

Quizzes worth 10%

Assignments worth 30%

Expected output: (Percentage must integer representation)

Test Average: --%

Quiz Average: --%

Assignment Average: --%

Overall Average: --%

For this example, I assume the following test, quizzes and assignment scenario. (You should not use same scenario)

Course Break up Elements	Total Marks
Test 1	35
Test 2	35
Test 3	40
3 Quizzes were conducted	Each quiz was conducted for 10 Marks
3 Assignments were given to students	Each assignment was graded for 20 Marks



Introduction to Programming

Example Input:

Enter Test 1 score (Total - 35): 30
Enter Test 2 score (Total - 35): 32
Enter Test 3 score (Total - 40): 36
Enter Quiz 1 score (Total - 10): 8
Enter Quiz 2 score (Total - 10): 7
Enter Quiz 3 score (Total - 10): 8
Enter Assignment 1 (Total - 20): 20
Enter Assignment 2 (Total - 20): 18
Enter Assignment 3 (Total - 20): 15

Example output:

Test Average: 89%
Quiz Average: 77%
Assignment Average: 88%
Overall Average: 88%

Math calculation behind the above scenario

To get Test percentage

Test1 % = Test1 score/Test1 Total

Test1 % = $30/35 = 85.71$

Test2 % = Test2 score/Test2 Total

Test2 % = $32/35 = 91.42$

Test3 % = Test3 score/Test3 Total

Test3 % = $36/40 = 90$

Test average = $\frac{85.71+91.42+90}{3} = 89\%$

Similarly calculate Quiz and Assignment percentage



Introduction to Programming

For overall Percentage, you can choose to use below formula

$\text{Test1\%} * 20\% + \text{Tes2\%} * 20\% + \text{Test3\%} * 20\% + \text{Quiz\%} * 10\% + \text{Assignment\%} * 30\%$

Or

$\text{Test\%} * 60\% + \text{Quiz\%} * 10\% + \text{Assignment\%} * 30\%$

Submission:

- **You must submit a .py file**
- **Do your own work!** A mark of 0 will be assigned to the entire assignment for work that is not your own and will be handled as per the **Code of Student Rights and Responsibilities**
- **All work must be run and validated to ensure that it is free of errors.** Any assignment that is submitted showing errors that prevent it from running will receive a mark of 0.
- **Only apply the knowledge that we have learned in class to this point.** Answers using any syntax or knowledge that we have not covered yet will receive a mark of 0 for that question.
- **Any assignment submitted past the posted due date and time will receive a mark of**
- Do not wait until the last minute to complete and submit your work.