

Vashtia Caldwell and Brigham Ray

Lab 4 Gradebook

Section 4

7 October 2016

Post Lab

1. Problem statement

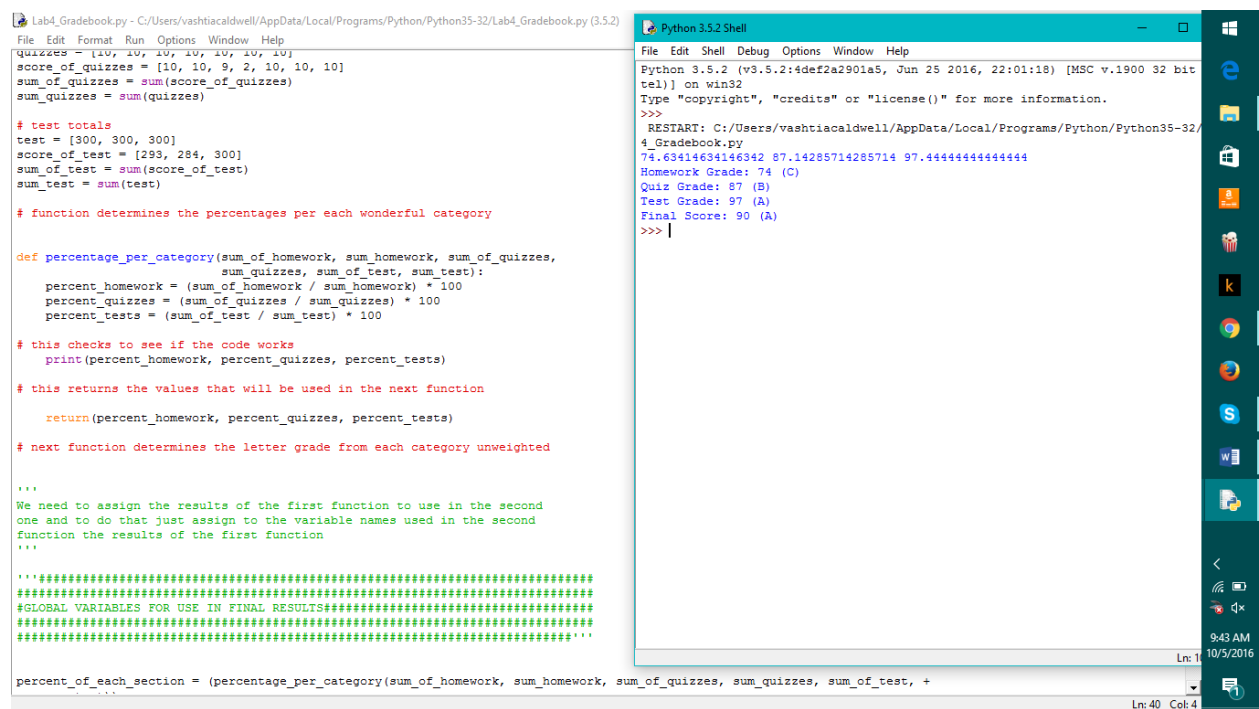
- a. What were the important features?
 - i. The important features of this lab was having to define multiple functions using the function definition feature in python. Another important feature was assigning the outputs of each function to a variable so that we could call it again when we needed it.
- b. What were the problem requirements?
 - i. The requirements of this problem was creating a program that could calculate the number and letter grade a set of scores from things done in that class. We had to use the function definition and were not allowed to use loops at all.

2. Planning

- a. When we were trying to solve this problem we commented out our thought process and until we knew pretty much how we were going to solve this. We figured out the math part first then tried to convert our math problems into usable code. After all the pain and tears we were able to finally get an output that matched our math we did on the paper.

3. Implementing and Testing

a.



```
Lab4_Gradebook.py - C:/Users/vashtiacaldwell/AppData/Local/Programs/Python/Python35-32/Lab4_Gradebook.py (3.5.2)
File Edit Format Run Options Window Help
quizzes = [10, 10, 10, 10, 10, 10, 10]
score_of_quizzes = [10, 10, 9, 2, 10, 10, 10]
sum_of_quizzes = sum(score_of_quizzes)
sum_quizzes = sum(quizzes)

# test totals
test = [300, 300, 300]
score_of_test = [293, 284, 300]
sum_of_test = sum(score_of_test)
sum_test = sum(test)

# function determines the percentages per each wonderful category

def percentage_per_category(sum_of_homework, sum_homework, sum_of_quizzes,
                           sum_quizzes, sum_of_test, sum_test):
    percent_homework = (sum_of_homework / sum_homework) * 100
    percent_quizzes = (sum_of_quizzes / sum_quizzes) * 100
    percent_tests = (sum_of_test / sum_test) * 100

# this checks to see if the code works
print(percent_homework, percent_quizzes, percent_tests)

# this returns the values that will be used in the next function

return(percent_homework, percent_quizzes, percent_tests)

# next function determines the letter grade from each category unweighted

'''
We need to assign the results of the first function to use in the second
one and to do that just assign to the variable names used in the second
function the results of the first function
'''

'''#####
#GLOBAL VARIABLES FOR USE IN FINAL RESULTS#####
#####'''

percent_of_each_section = (percentage_per_category(sum_of_homework, sum_homework, sum_of_quizzes, sum_quizzes, sum_of_test, +
```

```
Python 3.5.2 Shell
File Edit Shell Debug Options Window Help
Python 3.5.2 (v3.5.2:4def2a2901a5, Jun 25 2016, 22:01:18) [MSC v.1900 32 bit
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:/Users/vashtiacaldwell/AppData/Local/Programs/Python/Python35-32/
4_Gradebook.py
74.63414634146342 87.14285714285714 97.44444444444444
Homework Grade: 74 (C)
Quiz Grade: 87 (B)
Test Grade: 97 (A)
Final Score: 90 (A)
>>> |
```

4. Reflection

- a. We had to uncomment some things for our function to print properly. We also had to make sure our variable names accurately described the results we wanted. We

were also able to put the letter grade along with the percentage grade for each section and all them all together according to the weight of each section.