CSC 110 - Homework 1 - Practice Python

For each of the following exercises, be sure to test your answers by using Python on your own computer. Submit a separate .py file for each of the questions below.

1. Consider the following variable assignments:

```
a = 5
b = 2
c = 3
```

Create a Python file with these assignments as the first lines of code. Next, include a single Python statement to compute the value of z defined by the following equation:

$$z = \frac{2a - 3b}{8} + \frac{42}{a^2 - b^2} \times \frac{\frac{2}{a} + \frac{c}{6}}{b}$$

Finally, include a statement to print the value of z.

Save your code in a file called `hw1_1.py`.

2. Write Python program that will compute the final grade for a course with the following grade computation:

>   Homework: 45%
>   Midterm: 25%
>   Final Exam: 30%

Your code should do the following:

● Prompts the user to enter the Homework, Midterm and Final grades as float variables.
● Computes the final grade using the computation above.
● Print the final grade. When you print the final grade, you can use the built-in round() function to have the result rounded to 2 decimal places:

```
print("Your final grade is", round(finalGrade,2))
```

The output of the program should look like the following:

```
=== RESTART: /Users/ldipippo/Documen
Enter Homework grade: 85
Enter Midterm grade: 75.5
Enter Final Exam grade: 92.5
Your final grade is:  84.88
>>>
=== RESTART: /Users/ldipippo/Documen
Enter Homework grade: 60.5
Enter Midterm grade: 70
Enter Final Exam grade: 55.9
Your final grade is:  61.5
>>>
=== RESTART: /Users/ldipippo/Documen
Enter Homework grade: 95
Enter Midterm grade: 95
Enter Final Exam grade: 95
Your final grade is:  95.0
>>>
```

Save your code in a file called `hw1_2.py`.

Submit in Gradescope:

- Go to your [Gradescope](#) account.
- Go to your CSC 110 course.
- Click on Homework 1-1.
- Drag your `hw1_1.py` file into the Gradescrope file upload window and choose Upload.
- Wait for Gradescope to grade your code.
- If it is correct, you will see 100/100 as a result. If not, please work on your code in your Python IDLE editor to fix it. Once you are confident that it is correct, try again to submit to Gradescope.
- Do the same for Homework 1-2.