



## **COP 1000, Principles of Computer Programming**

Assignment 1: (30 points)

Write the stock transaction program.

### **Part 1. (15 points)**

Assuming there are no accidents or delays, the distance that a car travels down the interstate can be calculated with the following formula:

$$\text{Distance} = \text{Speed} \times \text{Time}$$

A car is traveling at 70 miles per hour. Write a program that displays the following:

- The distance the car will travel in 6 hours
- The distance the car will travel in 10 hours
- The distance the car will travel in 15 hours

### **Part 2: (15 points)**

Write a program that will ask the user to enter the amount of a purchase. The program should then compute the state and county sales tax. Assume the state sales tax is 5 percent and the county sales tax is 2.5 percent. The program should display the amount of the purchase, the state sales tax, the county sales tax, the total sales tax, and the total of the sale (which is the sum of the amount of purchase plus the total sales tax).

*Hint: Use the value 0.025 to represent 2.5 percent, and 0.05 to represent 5 percent.*

### **Deliverables:**

- Take a screen shot of your ran program in paste it in a word file
- Submit your .py file/s
- Write a few sentences about what you learnt from writing the program and if you had faced any challenges. If you have faced challenges, I would like to know how you addressed those challenges.

Purpose: The assignment would assess the comprehension of input, output and basic logic of the python programming language.

**Program Rubric showing the breakdown of points:** Part 1: (15 points) and Part 2: (15 points)

Deliverables	Points
Screen shot/s of the ran program	3
.py program files	10
Reflections & Challenges	2
Total	15