

## Homework Week 04

1. If you can travel a distance of 55 miles at an average speed of 15 miles per hour. Write a program to calculate the total number of hours you will take to cover this distance. The program should print the total time taken in hours and minutes. Use the following formula for calculations.

$$Time = \frac{Distance}{Speed}$$

2. Grade point average (GPA) in a 4-point scale is calculated by using the following formula:

$$GPA = \left( \frac{Percentage}{100} \right) \times 4$$

Write a program that takes as input the percentage from a user. The program should then output the user's GPA on the screen. The format of the output should be as follows, assuming the user's percentage is 85:

$$\left( \frac{85}{100} \right) * 4 = 3$$

3. The basic code for Lab Week 04 has been uploaded. Go through the code and identify how the number of lines in the code can be reduced by using:
  - a. Arrays
  - b. Methods
  - c. Loops

The program in the current form does not use Object Oriented Programming concepts. Try and identify how the program can be improved by using OOP concepts.