

## **Computer Science Department**

## COMP1310

Assignment # 4 Due Date: Friday (17/06/2022)11:59 pm only on ITC-MetaCourse

Notes:

- 1. You should include all the steps that you followed to find the answer.
- 2. The assignment should be submitted on the due date to ITC-MetaCourse as a reply to message called Assignment Four submission.
- 3. The assignments are individual effort and copying the assignment will be treated as a cheating attempt, which may lead to FAILING the course.

Question One:

Write a C program to read the distance and the traveled time for several cars N (ask the user to enter number of cars) then calculate the speed of each car.

Your program should calculate and perform the following:

 $\cdot$  In the main function, read the distance and time values for each of the cars.

 $\cdot$  Calculate the speed for every car using the function described below. Display the speed and speed category on screen.

The speed category be determined by the car's speed value: if the speed is over will 120, it will be super-speed, if it is between 80-120 inclusive, then it will be medium speed, and if it is less than 80, it will be normal speed.

In the main function, you should also calculate and display the average speed of all the cars and the number of cars in each category.

 $\cdot$  You need to write the function calculate\_speed that accepts distance and time as inputs and returns speed as output.