## **Practice 4: Decision Making (part2)**

- Objective: Understand and know how to use Decision Making (if, if else, else)
- Deadline: 06 September 2021, 11:59pm
- File submit:
  - A pdf report (consists of cover, table of content, exercise and solution with screenshot). File name: yourname\_report\_practice4
  - o A zip file contains course codes (Each file name is: Practice4\_problem##)

## Write c program to solve the problem:

1. Write a C program to check whether a triangle is Equilateral, Isosceles or Scalene.

Input: a=10, b=10, c=10

Output: This is an equilateral triangle.

Remark: (Equilateral is a triangle with three equal sides, Isosceles is a triangle with two equal sides and Scalene is a triangle with no equal side.)

2. Write a C program to accept a coordinate point in a XY coordinate system and determine in which quadrant the coordinate point lies.

Input: x=-1, y=3

Output: The coordinate (-1,3) lies in the second quadrant.

- 3. Write a C program to tell how much tax a person should pay based on his/her salary and gender. The program asks a user for gender, name, and salary (US dollar). The tax is based on the following rules:
  - -pay tax 10%, for male and salary is more than 300 USD.
  - -pay tax 5%, for male and salary is in between 200USD and 300 USD.
  - -pay tax 5%, for female and salary is more than 300 USD.
  - -pay tax 3%, for female and salary is in between 250 USD and 300USD.
  - -Otherwise, no need to pay tax.

Input: gender: M

name: Tom salary (USD): 280

Output: Hi Tom, based on your given information, the tax salary that you need to

pay is: 8.4 USD.