## Lab 3 - Control Structure

## Answer the following questions.

## Instructor-led Demo:

1. Demonstrate the use of selection, looping, and enhance-for on a given scenario.

## Exercise:

- 1. Write a program that sorts three integers. The integers are entered from the console and stored in variables, num1, num2 and num3, respectively. The program sorts the numbers so that num1 <= num2 <= num3.
- 2. Write a program that reads three edges for a triangle and computes the perimeter if the input is valid. Otherwise, display that the input is invalid. The input is valid if the sum of any two edges is greater than third edge.
- 3. Write a program that prompts the user to enter the month and year, and displays the number of days in the month. For example, January is 31 days, February is 28 days, March is 31 and etc.

4. Write a program that prompts the user to enter assignment marks and displays the grade of the keyed in marks. The grading table is as follows:

Marks	Grade	Description
0-40	F	Fail
40-49	F+	Marginal Fail
50-54	D	Pass
55-64	С	
65-69	В	Credit
70-74	B+	
75-79	A	Distinction
80-100	A+	

- 5. Write a program that sum up all the values in double typed of an array. The array capacity is 100. You are required to use for-each construct (enhanced for).
- 6. Suppose that the tuition of a university is RM10000 this year and this tuition fee increases 5% every year. Write a program that uses a loop to compute the tuition in ten years.
- 7. Use do-while construct, write a program that prompts the users to continue the program execution. "Yes" to continue the program and "No" to terminate the program.