



CHIANG MAI UNIVERSITY
Bachelor of Science (Software Engineering)
College of Arts, Media and Technology
1st Semester / Academic Year 2019
SE 103 PROGRAMMING LOGICAL THINKING

Lab Assignment 09 : Nested Loop

Name Student ID Section.....

Objectives:

- 1) The student understands the concept of Nested Loop
- 2) The student can appropriately choose and apply the control structure.

Note that the nested structure <u>must be used</u> .

Nested Loop

1. Develop a program to calculate the grade from student's score. The grade criteria are as follows:

Lower bound	Upper bound	Grade
80	100	A
70	79	B
60	69	C
50	59	D
0	49	F

(Signature)

2. Develop a program to calculate the income tax based on the following criteria.

- 1) For the first 50,000 baht, the tax is 5%.
- 2) For the **next** 50,000 baht, the tax is 6%.
- 3) For the **next** 100,000 baht, the tax is 7%.
- 4) For the **next** 100,000 baht, the tax is 8%.
- 5) Then, the remaining tax is 10%

Test case:

Income	25000	75000	150000	250000	350000
Tax	1250	4000	9000	16500	25500

(Signature)

3. Write a program to receive integer from user as N, if N is a prime number display "N is prime". Otherwise, display "There is no prime".

Signature _____

4. Write a program to receive positive integer numbers from user as N and display all of the prime number between 1 to N.

Signature _____

5. Write a program to receive 2 positive integer numbers from user as N and M then display a multiplication table of N to M.

Ex. N = 2, M = 4

Result: 2 X 1 = 2, 2 X 2 = 4,....., 2 X 12 = 24

3 X 1 = 3, 3 X 2 = 6,....., 3 X 12 = 36

4 X 1 = 4, 4 X 2 = 8,....., 4 X 12 = 48

Remark: you can display multiplication table in any format

Signature _____