

Lab 6

Create a new Eclipse project named **YourStudentId_Lab6** and add a class named **Tester6** to the project.

1. Based on lab4 question 1, rewrite the program as a static method named **toLetterGrade** that print the corresponding letter grade of the input parameter **score** which type is integer.

Hints:

- Prompt the user for a score (0 ~ 100) in main method.
- Pass the input parameter to **toLetterGrade**.

Sample output: (the green one is user input)

```
Please input a score (0~100): 98
98 = A
```

2. Write a static method named **findHCF** that find the highest common factor (HCF) of two input parameters, **num1** and **num2** which type are integer, then return the HCF.

Hint:

迴圈 + if else

- Use a for loop that iterates through 1 to the smaller number.
- You can use either method in Math class or if-else to find the smaller number.
- You may declare a variable to store the common factor.
- Prompt the user for two positive integers in main method.

Sample output:

```
//Example 1
Please input a positive integer: 70
Please input another positive integer: 60
The HCF of 70 and 60 is 10

//Example 2
Please input a positive integer: 75
Please input another positive integer: 150
The HCF of 150 and 75 is 75
```

3. Based question 2. Write a Javadoc comment for **findHCF**.
4. Write a static method named **findLCM** that find the least common multiple (LCM) of two input parameters, **num1** and **num2** which type are integer, then return the LCM.

Hint:

- Start from the bigger number x.
- You can use either method in Math class or if-else to find the bigger number.
- Please iterate all number greater than x until LCM is found. (You may find another solution on Wikipedia, don't use that.)
- Prompt the user for two positive integers in main method.

Sample output:

```
//Example 1
Please input a positive integer: 70
Please input another positive integer: 45
The LCM of 70 and 45 is 630

//Example 2
Please input a positive integer: 45
Please input another positive integer: 90
The HCF of 45 and 90 is 90
```

LCM

Submission: Submit your project as “zip (or rar) file” via WM5. No other submissions will be graded.

Reminder: Please zip **the whole project**

Deadline: Tomorrow’s midnight (for both Mon56 and Tue23)