

Lab 5

Create a new Eclipse project named **YourStudentId_Lab5** and add a class named **Tester5** to the project.

1. Based on lab4 question 1, rewrite the program so that the user can input the score again and again until the input is “q”.

Hints:

int	parseInt(String s) Parses the string argument as a signed decimal integer.
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```
String userInput = in.next();
//is userInput = "q"? if not, go to the following block.
    int score = Integer.parseInt(userInput); // parse String to int.
    //codes in lab4 question 1
    //ask the user to input a valid argument again.
```

Sample output: (the green one is user input)

```
Please input a score(0~100) or q to quit the program: 70
B
Please input a score(0~100) or q to quit the program: 90
A
Please input a score(0~100) or q to quit the program: q
```

2. Write a program that prompts the user for a positive integer x, then prints all factors of x.

Hints:

Use the operator “%” and iterate through all positive integer smaller than the integer the user input (1 ~ number-1).

Sample output: (the green one is user input)

```
Please input a positive integer:20
Factors of 20: 1 2 4 5 10
```

3. Print the funnel. Please use the for loop, print(), println(), the symbol “*”, and space “ ” to show a funnel on the console.

Hint: nested for loop, count of “*” in each line: “7, 5, 3, 1, 1, 3, 5, 7”.

Sample output:

```
*****
 *****
  ****
   ***
    **
   ***
  ****
 *****
*****
```

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)