

112-2 APP Design (327097)

Assignment #1

Assignment # 1 (1/3)

- Complete a Kotlin program with following requirements:
 - Use `readln()` to input multiple set (at least 4 sets) of numbers (containing only 0, 1, ...,9) until a “**done**” is inputted for indicating the termination of input process.
 - When a set of numbers is inputted, call **`checkNumber()`** function to check if the input is correct or not. If the input contain only the characters form 0, 1, ...9, then this function will return true, otherwise it should return false.
 - When the input is not correct, prompt the user with message “Error input, try again!” for re-input the numbers again.
 - When all sets of numbers are inputted and checked, print out all the numbers first. Then call the **`maxNumber()`** function to return the maximum numbers of the inputs and print it out. Finally, call the **`averageNumber()`** function to calculate the average value of the inputs, and print it out.
 - The `maxNumber` and `averageNumber()` should all use **`vararg`** for taking variable number of arguments.

Assignment # 1 (2/3)

- Your Kotlin program should contain fun main (), and three other functions: checkNumber(), maxNumber() and averageNumber().
- Use **Kotlin Playground** or **IntelliJ IDEA** to execute and test your program. A sample for how you should test your program (**need to input incorrectly at least twice**) is as follows:

```
Enter number (or "done" to complete): 123
Enter number (or "done" to complete): 234
Enter number (or "done" to complete): abc
Error input, try again!
Enter number (or "done" to complete): 345
Enter number (or "done" to complete): 45@$
Error input, try again!
Enter number (or "done" to complete): 456
Enter number (or "done" to complete): done
The input numbers are: [123, 234, 345, 456]
The maximum number of input is: 456
The average of input is: 289.5
```

Assignment # 1 (3/3)

- Submit a zip file to **NTUT/ischool_plus** to complete the assignment.
- The zip file should use your student ID for naming (e.g., 110318099.zip), and the zip file should contain two files:
 - 1) **Main.kt**: this is your Kotlin program
 - 2) **Result.jpg** (or Result.png): A snapshot for showing the execution and testing of your program
- The due date of this assignment: **2024/03/22, Friday, 22:00**