Weekly Homework I

Jonghyeok Kim

July 8, 2023

In previous lessons, I taught you a few building blocks of Kotlin.
Through our journey starting from variables, Taewan's understanding of Kotlin will be a more solid thing.

1 Exercise 1.1

We learned variables and constants from the previous lessons. It is used in storing and retrieving data.

Answer the following statements.

- Is it possible that a null value is assigned to a variable which is defined promitive types in Kotlin without a question mark?
- If the above is not valid, what method could you select from?
- what are the data types of variables? (Only answer the primitive types)
- How retrieve data of variables or constants within a string?

2 Exercise 1.2

We also learned object-oriented programming (OOP) in the previous lessons. Especially, Kotlin provides fully featured support for object-oriented programming. I suggest the following statements to you.

- What is object-oriented programming?

In OOP, the following concepts are very centralized, so I want you to investigate these concepts.

- Encapsulation of data
- Inheritance
- Polymorphism
- Is it possible that some data within a class might be considered private implementation details is exposed to anything outside the class according to encapsulation concept?

3 Exercise 1.3

In programming languages, concepts about control flow is very critical. Likewise, such concepts is well constructed in Kotlin. We already observed that both for and while loops as well as if statements are considerably similar to Python and Swift language.

- Iterate over an list is randomly defined using the forEach loop.
- Iterate over the above defined list only using the for loop. (Hint: use a size property and get method defined in the list. Also, in keyword could be used)