VIETCODE ACADEMY INTRODUCTION TO PROGRAMMING

SESSION 1:
Data type, variable, and basic syntax

TEACHER INFORMATION

TEACHER

TEACHING ASSISTANTS

Data types

In programming there are three main data types that we need to pay attention to:

1. Intenger (int):

   Example:: 10,100,12345

2. String (str):

   Exmaple: "Vietcode", "Bao is handsomei",

* NOTE WHEN USING STRING TYPE REMEMBER TO USE quotes

3. Boolean: Includes True and False to represent true and false

Variable and why?

1. Definition
   - Imagine data as a fine Kobe beef that Teacher Husky likes to eat the most
   - Variable is a box contains this piece of beef
2. Why
   - If we only have a piece of beef without a box, we can't keep it in the fridge, we can't store it for the teacher to eat every day after each lesson.
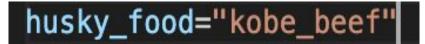
=> Variables use for storing data for later use

Declare variables and assign values

1. Variable must always have its name, and the name will be literal.

*NOTE NOW WE DON'T USE THE QUOTES TO CREATE VARIABLES' NAMES

2. To assign a value to a variable we use =
3. Example:

```
husky_food="kobe_beef"
```

- Now the husky_food variable has been assigned the value "kobe_beef"

Assign value to variable from terminal

- Instead of always entering the value for
the variable in the lines of code, we can
run the program first and then enter the
variable in the terminal

- Syntax:

```
a=input()
```

* Note that after entering the value from terminal, the
variable a will have data type of string, even if you enter
100, a will still be "100"

Basic syntaxes

1. Print (value): Using print will cause the value to be displayed in the terminal. Values can be data and can also be variables.
2. Add, subtract, multiply, divide, get balance with numeric data (int) will correspond to the characters +, -, *, /, % in programming.
3. Plus string data type. Note when "100" + "100" will not be 200 but "100100"

Special syntax

- So now if I want to print out a sentence "I have 100 dong", using the variable money has the value of 100, but not using the number 100, how to do it?
- We have structure: print("{}".format(variable)), then the value of the variable will insert in the {} part of the string.
- Example:

```
money=100
print("Tôi có {} đồng".format(money))
```

PRACTICE WITH FILE INCLASS1