Session 1: Assignments

1. Read chapter 2 of the following book:

<http://www.ict.ru.ac.za/Resources/cspw/thinkcspy3/thinkcspy3.pdf>

***Nếu bạn không đọc được tiếng anh, mặc dù không khuyến khích, bạn có thể đọc tài liệu sau để thay thế:***

<http://phocode.com/python/python-cac-kieu-du-lieu-co-ban/>

and answer the following questions:

* How to check a variable’s type?
* In what cases, you will get ***SyntaxError*** from the compiler telling you that some of your variables have **invalid names**? Can you give 3 different examples of **invalid names**?

**Answer:**

* 1. To check a variable type, we use the “type” command in Python
  2. Cases you have variables with invalid name:

(+) Name begins with a number

(+) Name that contains Python key word

(+) Name that contains “$” sign

3 examples of invalid variable names:

(+) 500k

(+) pass\_rate

(+) $amount

1. Write a program that calculates the **area** of a **circle**. The circle radius is entered by users

Expected screen output:

|  |  |
| --- | --- |
|  |  |
| # This one is fine | # This one is a little bit better |

Answer: Refer to file “BTVN\_2.py”

1. Write a program that converts **Celsius** (0C) into **Fahrenheit** (0F)

Expected screen output:

|  |  |
| --- | --- |
|  |  |
| # This one is fine | # This one is a little bit better |

Answer: Refer to file “BTVN\_3.py”

|  |  |
| --- | --- |
| *http://www.bestappsforkids.com/wp-content/uploads/2012/04/save-turtle.png* | ***Turtle exercise*** |

Use Python Turtle to draw the following shapes

|  |  |
| --- | --- |
| 1. **A square** | 1. **An equilateral triangle** |
| 1. **A circle (Hint: Google “*Python Turtle Circle*”)** | 1. **Multi-circles**     Or even better: |

Answer: Refer to file “BTVN\_Turtle” (from 1 to 4)

|  |  |
| --- | --- |
| system_config_boot.png | ***Tools preparation*** |

Sign up a <https://github.com> account

Done