TECHKIDS
CODE THE CHANGE

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**?

2. Write a program that calculates the **area** of a **circle**. The circle radius is entered by users
   Expected screen output:

`Radius? 10` `314.0`	`Radius? 10` `Area =  314.0`
`# This one is fine`	`# This one is a little bit better`

3. Write a program that converts **Celsius** (^{0}C) into **Fahrenheit** (^{0}F)
   Expected screen output:

`Enter the temperature in Celsius? 10`
`50.0`
	`Enter the temperature in Celsius? 10`
	`10 (C) =  50.0 (F)`
	f

`# This one is fine`	`# This one is a little bit better`

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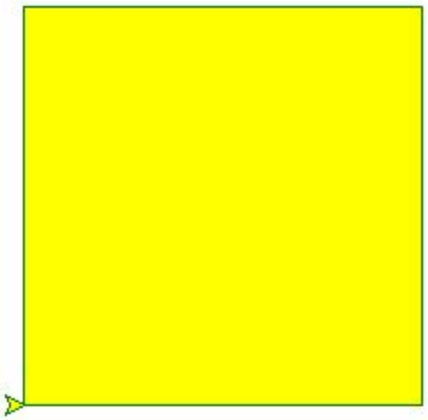
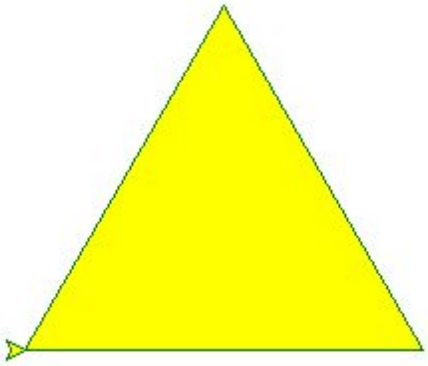
Turtle exercise

Use Python Turtle to draw the following shapes

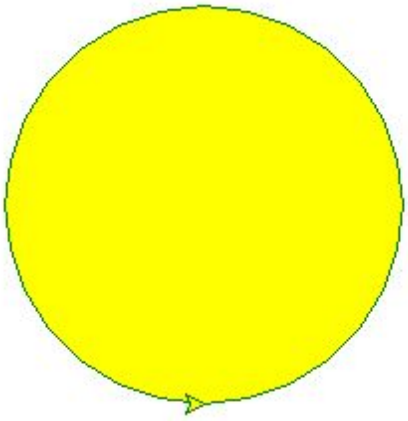
1. **A square**



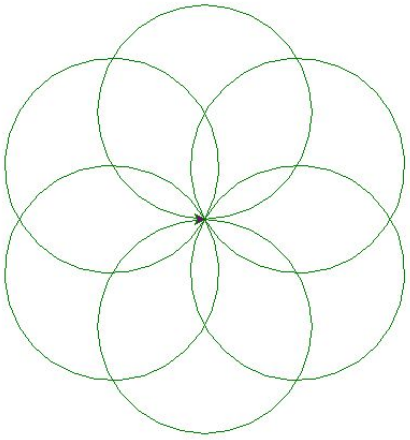
2. **A right triangle**



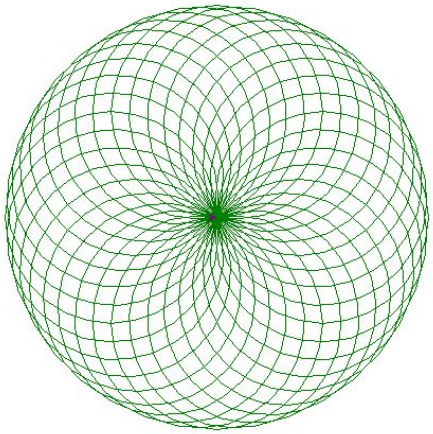
3. **A circle (Hint: Google "*Python Turtle Circle*")**



4. **Multi-circles**



Or even better:

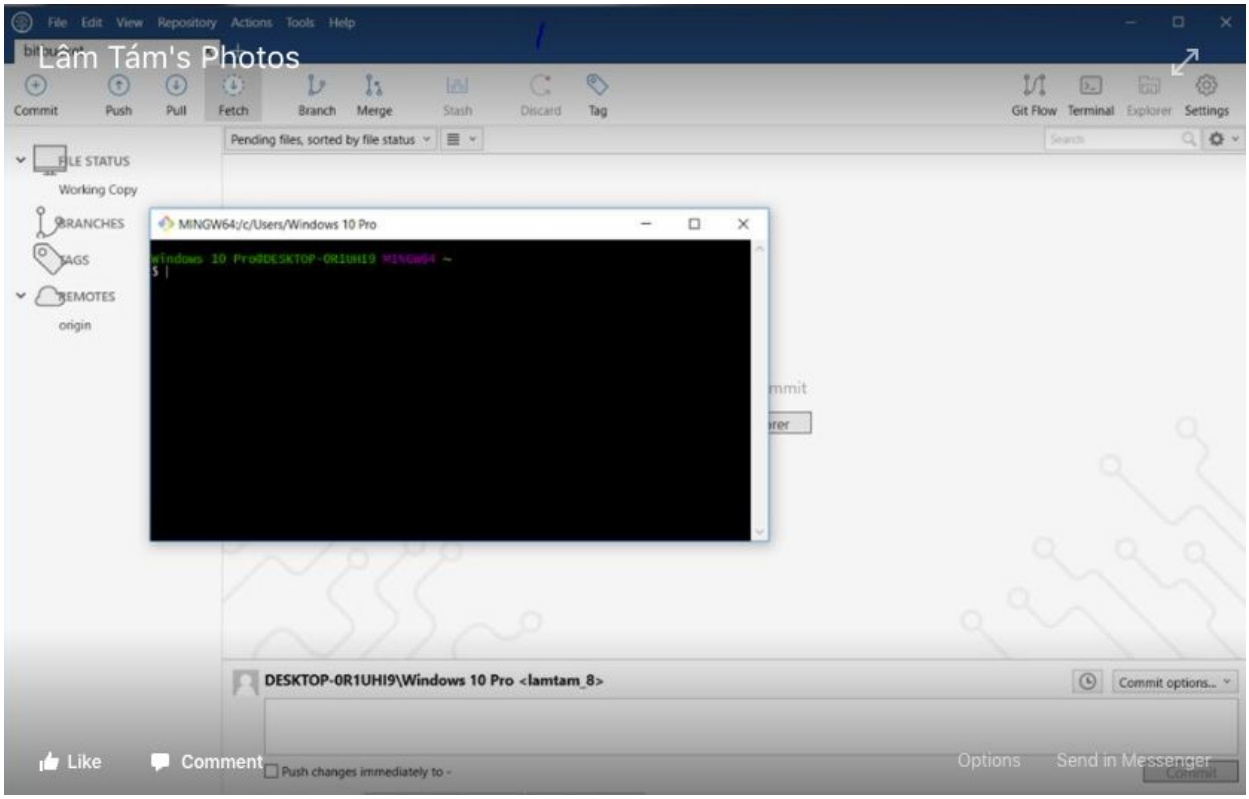


Tools preparation

Download and install the following tools, ask TAs for help if needed:

+ Git-Scm: https://git-scm.com/downloads
+ Source Tree: https://www.sourcetreeapp.com/

Along with your homework, send us the proof that you're ready installed these software and have successfully opened them, for example:



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Google: Python Fibonacci