

## 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:

<pre>Radius? 10 314.0</pre>	<pre>Radius? 10 Area = 314.0</pre>
<pre># This one is fine</pre>	<pre># This one is a little bit better</pre>

3. Write a program that converts **Celsius** ( $^{\circ}\text{C}$ ) into **Fahrenheit** ( $^{\circ}\text{F}$ )

Expected screen output:

<pre>Enter the temperature in Celsius? 10 50.0</pre>	<pre>Enter the temperature in Celsius? 10 10 (C) = 50.0 (F)</pre>
<pre># This one is fine</pre>	<pre># This one is a little bit better</pre>

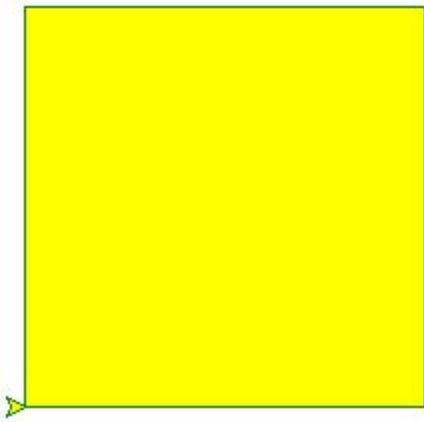


## ***Turtle exercise***

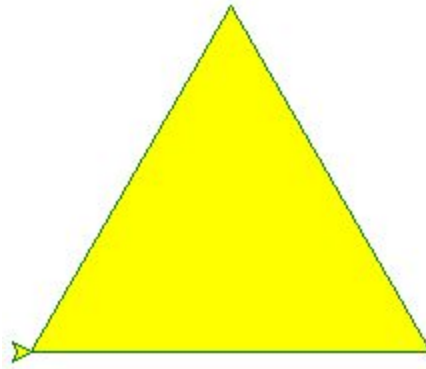
Use Python Turtle to draw the following shapes

*Hint: google “python turtle colors fill”*

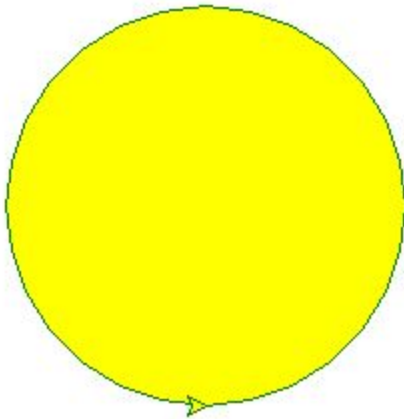
**1. A square**



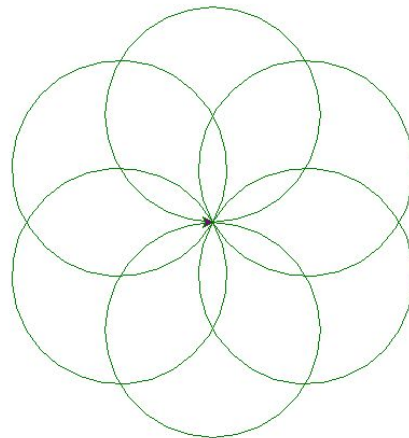
**2. An equilateral triangle**



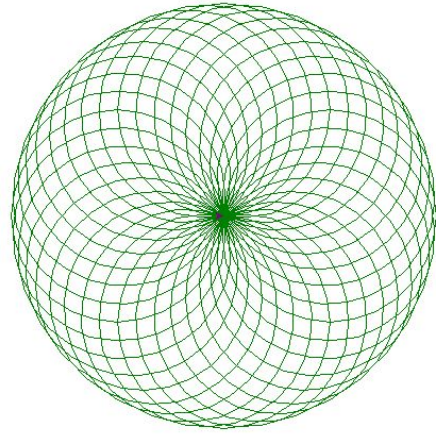
**3. A circle (Hint: Google “Python Turtle Circle”)**



**4. Multi-circles**



Or even better:



## ***Tools preparation***

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