Session 1: Assignments

1. Read chapter 2 of the following book:

and answer the following questions:

* How to check a variable’s type?

Use type() function in immediate mode

>>>b=1

>>>type(b)

<class 'int'>

>>> type("hi")

<class 'str'>

* In what cases, you will get ***SyntaxError*** from the compiler telling you that some of your variables have **invalid names**?
* Not begin with a letter
* Containing an illegal character
* Using one of the Python keywords
* Can you give 3 different examples of **invalid names**?
* 22ThanhCong=”Techkids”
* tienhoc$ = “Tien luong mot thang”
* break = “Chay tui”

1. Write a program that calculates [the **area** of a **circle**](radius%20calculation.py). The circle radius is entered by users
2. Write a program that [converts **Celsius** (0C) into **Fahrenheit** (0F)](CF%20conversion.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**   [https://lh6.googleusercontent.com/8raEoA3Yv8wNx0FXUmOxAgaYY7NgCVbWFojweKFeJo3q0rYp8N1JBPxYkmB9faNFxS0UKQyFBDib-0fdxnj9jA0Ltc-IBfqp-0uHD_HpdyjsN--E4SYMJOdIDZvX5ZszjruEryxv](turtle_square.py) | 1. **A right triangle**   [https://lh4.googleusercontent.com/TJfzI2VVqPi927obzghh617sVUs8Ph2LIqZIqYye8j_8uEapnWAb-RGtOT14LxljJyxhPvBfMj-XBW2CpSfDFWw0g4c0gXFmsZyY5uqKjPHz0o0odxmSYAyrXdJBVDPcopfNSxeJ](turtle_triangle.py) |
| 1. **A circle (Hint: Google “*Python Turtle Circle*”)**   [https://lh4.googleusercontent.com/gamWB-KKnWJtbSkYDGhAndMp320HQ67K8ru6AalSrm_zODeCjphNd8kq5NSUdIEVfzdLHLOIYUz9bwoMPo4WlkgYuVlddiHF5L8waAgZe7L7MXTG_yRA6iNChLC54VD9iB9eCCGW](turtle_circle.py) | 1. **Multi-circles**   [https://lh5.googleusercontent.com/CNqlhQ1UTLIJdtVqyc0KeyMheJNxdPUX4FnCyJDnowOHnebGGBAydsx4c3iQJi9HTO3kjv3xSXtQscd5BsvCEOgbVXPW0n-7P9cV1LF54buCItAtMKZUGXFufOd9BpkIBDZuuuJu](turtle_circle6.py)  Or even better:  [https://lh3.googleusercontent.com/nyRfcWZ4qQPr8OMP29duZmPAjpbvtOkclIFtEgA_okXMce7akZbTBitJn1zSfBFkxFuvVT8efAOlz5jTs24nvwQ2F_GqFNqRiISJ1E7Ddeuh26ljeMiH5rbcFY74Cljks7KPGFKT](turtle_circle36.py) |

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

Sign up a <https://github.com>  account: => Username: hunterdevil308