

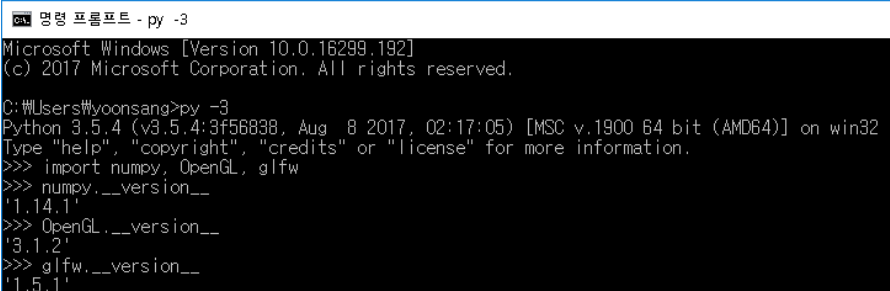
## Computer Graphics Assignment 1

Handed out: March 6, 2018

**Due: 23:59, March 11, 2018 (NO SCORE for late submissions!)**

1. Before doing practices and assignments in the course, you will need to setup a Python 3.5 environment and run basic examples to familiarize yourself with Python. To do this,
  - A. Install Python 3.5.x, NumPy, PyOpenGL, PyOpenGL\_accelerate, glfw as instructed in the lecture slide 2-PythonReview.
  - B. Start the python interpreter in the interactive mode and import numpy, OpenGL, glfw and print the version of those modules and capture the screenshot. Refer the example screenshot B.jpg below.
  - C. In the interactive mode, enter the code in page 16-27 of 2-PythonReview and capture the screenshot.
  - D. Make an empty Python source file (.py) and write down the code in page 28-30, 32-35 of 2-PythonReview to the file. Then, run the source file (using Python non-interactive mode) and capture the screenshot.
  - E. You can use Windows command prompt or Linux terminal or something like that for running Python interpreter.
2. What you have to submit:
  - A. **A compressed .zip file** of the screenshot images of 1-B, 1-C, 1-D.
    - i. The zip file name should be set to your name (e.g. GildongHong.zip)
    - ii. Example screenshot images:

1. B.jpg



```
명령 프롬프트 - py -3
Microsoft Windows [Version 10.0.16299.192]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Wyoonsang>py -3
Python 3.5.4 (v3.5.4:3f56838, Aug 8 2017, 02:17:05) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import numpy, OpenGL, glfw
>>> numpy.__version__
'1.14.1'
>>> OpenGL.__version__
'3.1.2'
>>> glfw.__version__
'1.5.1'
```

2. C1.jpg

```
명령 프롬프트 - py -3
C:\Users\yoonsang>py -3
Python 3.5.4 (v3.5.4:3f56838, Aug 8 2017, 02:17:05) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> 1 + 1
2
>>> a = 4
>>> type(a)
<class 'int'>
>>> c = 2.1
>>> type(c)
<class 'float'>
>>> 3 > 4
False
>>> test = (3 > 4)
>>> test
False
>>> type(test)
<class 'bool'>
```

3. C2.jpg

```
명령 프롬프트 - py -3
>>> x = 3
>>> print(x+1)
4
>>> print(x-1)
2
>>> print(x*2)
6
>>> print(x ** 2)
9
>>> x += 1
>>> print(x)
4
>>> x *= 2
>>> print(x)
8
>>>
```

4. ... (Capture the screenshot as needed)

5. D1.jpg

```
명령 프롬프트
C:\Users\yoonsang\Downloads>py -3 assignment1.py
cat
dog
monkey
#1: cat
#2: dog
#3: monkey
cute
True
wet
N/A
wet
N/A
A person has 2 legs
A spider has 8 legs
A cat has 4 legs
A person has 2 legs
A spider has 8 legs
A cat has 4 legs
```

6. ... (Capture the screenshot as needed)