# Week 6 – Lecture Notes

## Review

1. 有沒有想到可以用程式解決的問題? 寫pseudocode
   1. 小黑 - Renderman Texture Node Manager
   2. Joey – Rigging
   3. Alpha – file management
2. CodeAcademy 14-16問題?

## 複習 – Lesson 13 –Loops

1. While
2. For
3. Break

## 總複習

1. Built in Functions
2. Built in Types
   1. Type methods
3. Standard Modules
4. Syntax Structures

## OS - <https://docs.python.org/2/library/os.html>

1. os.listdir
2. os.mkdir
3. os.makedirs
4. os.remove
5. os.removedirs
6. os.rename
7. os.rmdir

## Os.path - https://docs.python.org/2/library/os.path.html

1. os.path.exists
2. os.path.isfile
3. os.path.isdir
4. os.path.walk

## Shutil - https://docs.python.org/2/library/shutil.html

1. shutil.copyfile
2. shutil.copytree
3. shutil.rmtree

## Subprocess - <https://docs.python.org/2/library/subprocess.html>

1. subprocess.call
2. subprocess.popen

## FILE Input/Output

**with** open(path, "r") **as** fileobj:

texts = fileobj.read()

**with** open(path, "w") **as** fileobj:

fileobj.writelines(texts)

**with** open(path, "w") **as** fileobj:

**for** x **in** texts:

fileobj.write(x + "**\n**")

1. file open modes
   1. r, read
   2. r+, read and write
   3. w, write
   4. w+, read and write, create file if not exist
   5. a, append
   6. a+, read and append

## unicode csv

csvlist = []

**for** x **in** range(0,100):

row = []

**for** y **in** range(0,5):

row.append(str(y))

csvlist.append(row)

**with** open(path, "w") **as** fileobj:

csvwriter = csv.writer(fileobj, lineterminator="**\n**")

csvwriter.writerows(csvlist)

**with** open(path, "w") **as** fileobj:

csvwriter = csv.writer(fileobj, lineterminator="**\n**")

**for** x **in** csvlist:

csvwriter.writerow(x)

**with** open(path, "r") **as** fileobj:

csvreader = csv.reader(fileobj)

**for** row **in** csvreader:

**for** col **in** row:

**print** col

## Selenium - <https://selenium-python.readthedocs.org/>

範例1:

from selenium import webdriver

driver = webdriver.Firefox()

driver.get("http://www.python.org")

assert "Python" in driver.title

driver.close()

1. driver.get()
2. locating elements
   1. 尋找element
      1. find\_element\_by\_id()
      2. find\_element\_by\_name
      3. **find\_element\_by\_xpath**
      4. find\_element\_by\_link\_text
      5. find\_element\_by\_partial\_link\_text
      6. find\_element\_by\_tag\_name
      7. find\_element\_by\_class\_name
      8. find\_element\_by\_css\_selector
   2. 尋找elements (請注意複數)
      1. find\_elements\_by\_name
      2. **find\_elements\_by\_xpath(用這個就好了)**
      3. find\_elements\_by\_link\_text
      4. find\_elements\_by\_partial\_link\_text
      5. find\_elements\_by\_tag\_name
      6. find\_elements\_by\_class\_name
      7. find\_elements\_by\_css\_selector
3. Input with keys module, from selenium.webdriver.common.keys import Keys
   1. find an input and element.send\_keys()
   2. find a clickable element and use click()
   3. submit() a form
4. is\_displayed()
5. is\_enabled()
6. is\_selected()
7. text
8. click()