## **Modules**

## 1. Using Standard Modules

```
In [5]: import random as ra
         print(ra.randint(1, 10000))
         5236
 In [6]: x = list(range(25))
         print(x)
         [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
         19, 20, 21, 22, 23, 24]
 In [8]: ra.shuffle(x)
         print(x)
         ra.shuffle(x)
         print(x)
         ra.shuffle(x)
         print(x)
         [3, 9, 21, 19, 1, 5, 24, 23, 7, 8, 16, 18, 15, 12, 10, 22, 17, 13,
         20, 11, 4, 14, 0, 6, 2]
         [18, 11, 9, 6, 12, 3, 24, 5, 17, 2, 7, 16, 22, 15, 0, 1, 14, 21,
         4, 13, 8, 23, 10, 19, 20]
         [22, 16, 11, 20, 21, 6, 5, 0, 19, 12, 8, 4, 7, 13, 18, 10, 3, 24,
         14, 2, 17, 15, 23, 1, 9]
In [9]: import datetime as dt
         t= dt.datetime.now()
         print(t)
         2015-10-01 15:38:06.775596
In [10]: print(t.year, t.month, t.day)
         2015 10 1
In [12]: print(t.hour, t.minute, t.second)
         15 38 6
```

```
In [13]: import os
print(os.getenv('PATH'))
```

/usr/local/mysql/bin/:/Users/krishnayamarthy/anaconda/bin:/Librar y/Frameworks/Python.framework/Versions/3.4/bin:/Library/Framework s/Python.framework/Versions/3.4/bin:/Library/Frameworks/Python.framework/Versions/3.4/bin:/Library/Frameworks/Python.framework/Versions/3.4/bin:/Library/Frameworks/Python.framework/Versions/3.4/bin:/usr/local/bin:/usr/bin:/usr/sbin:/sbin

```
In [14]: print(os.getcwd() )
```

/Users/krishnayamarthy/MyCourses/Python2/Section-11

## 2. Creating New Modules

```
In [18]: import myCode as my
         my.greet(5)
         Hello World!
         Hello World!
         Hello World!
         Hello World!
         Hello World!
In [20]: tot = my.sumNums(10, 20, 30, 40, 50)
         print(tot)
         150
In [23]: x = my.myRange(10, 100, 5)
         print(x)
         <generator object myRange at 0x10710d870>
In [22]: | list(x)
Out[22]: [10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 9
         0, 95, 100]
In [24]: | for i in x:
             print(i, end=' ')
         10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
```