**Python training Notes:**

**Course Name:** **SCRIPT 307: Basic Python**

**This is Part 1 of the whole training in the duration 17 to 31 July**

**This will be followed with next Part 2 session for Intermediate Python topics in the month of August.**

**Day 9: 27 Jul 2018 - Friday (2 Hrs Session)**

**Expectation Setting ASL (Assisted Self-Learning) 2Hrs session daily**

**And then do self-study and hands on assignments from below learning course link and the assignments given below here in this document:**

<https://knowledgecenter.persistent.co.in/ViewCourse/pmoc>

***Please visit the following URL to view the collaborative learning group***

<https://persistentuniversity.persistent.co.in/CollaborativeLearningGroup/view.aspx?SkillId=9144>

**Topics Covered:**

Exception Handling

**\*\*\*\*\*To Do for Day 9:**

Nugget 1 : Introduction to Python & Python Fundamentals

Nugget 2 : Python Basics

Nugget 3 : Python Control Structures

Nugget 4 : Functions & Modules

Subjective Assignment for Nugget 1 to 3 : Only for self Practice

522

1. Complete reading these 4 Nuggets from <https://knowledgecenter.persistent.co.in/ViewCourse/pmoc>

2. Please execute all codes in these 4 Nuggets

3. Start solving assignment at the end of Nuggets

\*\*Also read the Python documentation for the topics covered till date.

**Try Below Codes:**

**Exception Handling**

**1\_Exception\_Demo1.py**

try:

f = open('data.txt') #if file does not exists , IOError is raised, and then it transfers the control

#to the respective except block found for IOError

print "Let's read data.txt" #this will not be excuted if error occurs

except IOError:

print 'could not open file' #exption handler code

"""

Block code can be written here

"""

print "Continuation to the script execution............"

2\_Exception\_Demo2.py

def safe\_float(object): #user defined function

try:

retval = float(object) #float is predefined function retval=3.0

except ValueError:

retval = 'Value Error : could not convert non-number to float'

except TypeError:

retval = 'Type Error: object type cannot be converted to float'

except Exception:

retval = 'General'

return retval

ret1=safe\_float(3)

print ret1 #3.0

ret2=safe\_float('abc')

print ret2 # = 'Value Error : could not convert non-number to float'

ret3 = safe\_float({'a': 'Dict'})

print ret3 #'Type Error: object type cannot be converted to float'

3\_Exception\_finally.py

try:

testfile = open('test.txt')

try:

txns = testfile.readlines()

print txns

finally:

print "In Inner finally"

testfile.close()

except IOError:

print 'unable to access test file\n'

finally:

print "In Outer finally"

print "Continuation of program.........."

4\_User\_Exception.py

class MyError(Exception): #subclass MyError inheriting from super Exception class

pass

try:

raise MyError("Some information about what went wrong")

#this raised error will transfer the control to Python interpreter

except Exception:

print "In exception block: Handler code here........."

print "END!!!"

**Assignments to do:**

1. ***Let’s say I give you a list saved in a variable: a = [1, 4, 9, 16, 25, 36, 49, 64, 81, 100].***

***Write one line of Python that takes this list a and makes a new list b***

***that has only the even elements of this list in it. (Use filter and lambda)***

1. **Langauge, Country, Continenet**

Store the Country data in a dictionary to get the below o/p display.

{'Arabic': {'Bahrain': ['Manama'], 'Yemen': ["San'a"]},

'Chinese': {'China': ['Beijing']},

'English': {'Canada': ['Ottawa'],

'Fiji': ['Suva'],

'Ireland': ['Dublin'],

'United Kingdom': ['London'],

'United States': ['Washington DC']},

'Franch': {'Cameroon': ['Yaounde'],

'Djibouti': ['Djibouti'],

'Equatorial Guinea': ['Malabo'],

'France': ['Paris']},

'German': {'Germany': ['Berlin']},

'Greek': {'Greece': ['Athens']},

'Hungerian': {'Hungary': ['Budapest']},

'Indian': {'India': ['New Delhi']},

'Italian': {'Italy': ['Rome']},

'Japanese': {'Japan': ['Tokio']},

'Portuguese': {'Brazil': ['Brasilia']},

'Spanish': {'Argentina': ['Buenos Aires'],

'Honduras': ['Tegucigalpa'],

'Venezuela': ['Caracas']},

'Vietnamese': {'Vietnam': ['Hanoi']}}

Save the solutions in a folder: **Assignments\Day9**

**Assignments\Day9 --🡪**

**Q1.py**