**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 8: 26 Jul 2018 - Thursday (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:**

Modules/Packages

Linux Execution

**\*\*\*\*\*To Do for Day 8:**

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

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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:**

Modules

**mymath.py**

"""mymath - our example math module"""

pi = 3.14159

def area(r):

"""area(r): return the area of a circle with radius r."""

global pi

return(pi \* r \* r)

# write Fibonacci series up to n

def fib(n):

a, b = 0, 1

while b < n:

print b

a, b = b, a+b

if \_\_name\_\_ == "\_\_main\_\_":

#import sys

#fib(int(sys.argv[1]))

print "Learning Modules in Python......"

fib(35) #calling a function

print "END!!!!!"

**mymath2\_test.py**

#from mymath import pi

#from mymath import pi, area

from mymath import \*

print pi

print area(5)

fib(25)

**mymath2\_test2.py**

import mymath

print "-----------------------------------------------------------------"

print mymath.pi

mymath.pi+=100

print mymath.pi

print mymath.area(5)

mymath.fib(35)

mymath1.pi

Package :

1. Create Animals folder
2. Create Birds and Mammals module files in Animals folder
3. Create \_\_init\_\_ inside Animals package folder
4. Create test.py testing file outside Animals package folder

class Birds:

def \_\_init\_\_(self): #constructor

''' Constructor for this class. '''

# Create some member animals

self.members = ['Sparrow', 'Robin', 'Duck'] #members is an instance property

def printMembers(self): #instance method

print('Printing members of the Birds class')

for member in self.members:

print('\t%s ' % member)

"""

b1 =Birds()

b1.printMembers()

"""

class Mammals:

def \_\_init\_\_(self):

''' Constructor for this class. '''

# Create some member animals

self.members = ['Tiger', 'Elephant', 'Wild Cat']

def printMembers(self):

print('Printing members of the Mammals class')

for member in self.members:

print('\t%s ' % member)

**\_\_init\_\_.py**

from Mammals import Mammals

from Birds import Birds

#importing Mammals class from Mammals module file

**Test.py**

# Import classes from your brand new package

from Animals import Mammals

from Animals import Birds

# Create an object of Mammals class & call a method of it

myMammal = Mammals()

myMammal.printMembers()

# Create an object of Birds class & call a method of it

myBird = Birds()

myBird.printMembers()

**Assignments to do:**

1. **Language and Country**

Store the Country data only for Language and its list of countries in a dictionary.

Display the o/p as shown below -

Write a function for this, store it in a module and access this in your final application.

o/p---🡪

>>>

{'Portuguese': ['Brazil'], 'Franch': ['Cameroon', 'Djibouti', 'Equatorial Guinea', 'France'], 'Chinese': ['China'], 'Vietnamese': ['Vietnam'], 'German': ['Germany'], 'English': ['United Kingdom', 'United States', 'Fiji', 'Canada', 'Ireland'], 'Japanese': ['Japan'], 'Greek': ['Greece'], 'Indian': ['India'], 'Spanish': ['Venezuela', 'Argentina', 'Honduras'], 'Arabic': ['Yemen', 'Bahrain'], 'Hungerian': ['Hungary'], 'Italian': ['Italy']}