**Python training Notes:**

**Course Name:** **SCRIPT 502 : Intermediate Python**

**Day 1: 20 -02 - 2020**

**Post the session from my side do self-study and hands on assignments form below learning course link:**

<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=10339>

**\*\*\*\*\*To Do for Day1:**

Nugget 1 : Introduction to Python & Python Fundamentals

Nugget 2 : Python Basics

Nugget 3 : Nugget 3 : Python Control Structures

Nugget 4 : Functions & Modules

**Part of Intermediate Python:-**

Nugget 6 : Regular Expressions in Python

Nugget 7 : OOPs in Python

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

2. Please execute all codes in these 2 Nuggets

3. Start solving assignment at the end of Nuggets

**Topics Covered:**

**RegEx**

**OOP**

**Try Below Codes :**

**RegEx**

**12\_RegEx\_substitution2.py**

import re

# Lets try and reverse the order of the day and month in a date

# string. Notice how the replacement string also contains metacharacters

# (the back references to the captured groups) so we use a raw

# string for that as well.

regex = r"([a-zA-Z]+) (\d+)"

#(\1)(\2)

# This will reorder the string and print:

# 24 of June, 9 of August, 12 of Dec

replacement = r"\2 \1"

print re.sub(regex, replacement, "June 24, August 9, Dec 12") #24 June, 9 August, 12 Dec

#-----------------------------------------------------------------------------------------

"""

htmltag = "<img>Image Text</img>

#or

#htmltag = "<a>Anchor tag</a>

validate a given html tag for img or a tag

pattern =r""

replacement = r"\2 \1"

"""

**4\_RegEx\_findall2.py**

Import re

# If we need the exact positions of each match

regex = r"([a-zA-Z]+) \d+"

matches = re.finditer(regex, "June 24, August 9, Dec 12") #matches is a list of each match object

print "matches object = ", matches

for match in matches:

print "Match at index: %s, %s" % (match.start(), match.end())

**Assignments to do:**

**Assignment 1 ----->re, file handling**

1. ***Create a text file “emails.txt” and store a big list of valid and invalid email addresses on separate lines. Write a program to match the set of all valid e-mail addresses.***

2.Create Employee class.

Maintain class level variable “empCount” and write function “displayCount()” to

display the total empCount.

Define instance variables Name and salaray.

Also write instance method “displayEmployee() to display all employee details (Name and Salary)

3. Define words list as below-

words = ["abc", "123aaa", "xyz", "ABC" , "123", "ZZZZZ"]

Create a new list alpabetical\_words =[] , which should be populated only with alphabetical words in it from original words list.

So expected output is alpabetical\_words = ["abc", "xyz", "ABC" , "ZZZZZ"]

Give the solution by both ways-

1. Use list comprehension along with string method usage
2. Use list comprehension along with Regular expression to check the condition

4. Accept a price field as below:

**$12.55**

Please validate the price field with below conditions-

1. Price should begin with $
2. Then followed with at least 1 digit
3. Then followed with decimal point
4. Then followed with exact 2 digit entry only

So just as a hint Valid process are: $1.44 $22.66

Invalid prices are : $.45 $1.645646

Use Regular Expression.

5. Define Circle class.

Calculate the area of different circles with different radius.

Save the solutions in a folder: **Assignments\Day1**

Script names should be Q1.py, Q2.py, Q3.py

**Assignments\Day1 --🡪**

**Q1.py**

**Q2.py**

**Q3.py**

**Q4.py**