**PYTHON ASSIGNMENT 2**

**1. Write a program to print new list which contains all the first characters of string present in the list:**

**LIST\_STATES = ['GOA', 'RAJASTHAN', 'KARNATAKA', 'GUJARAT', 'MANIPUR', 'MADHYA PRADESH']**

IN[]:

lis = [print(j) for i in LIST\_STATES for j in i if j is i[0]]

OUT[]:

G

R

K

K

G

M

M

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**2. Write a program to replace each string with an integer value in a giver list of strings.**

**The replacement integer value should be sum of ASCII values of each character of type corresponding to the string:**

**LIST = ['GAnga', 'Tapti', 'Kaveri', 'Yamuna', 'Narmada']**

IN[]:

new = []

LIST = ['GAnga', 'Tapti', 'Kaveri', 'Yamuna', 'Narmada']

for i in LIST:

sum = 0

for j in i:

sum = sum + (ord(j))

new.append(sum)

print(new)

OUT[]:

[446, 514, 610, 619, 692]

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**3. ##### You have to run your program at 9:00 AM. Date : 14th April 2020**

**#HINT:**

**# You have to use datetime module or time module.**

**# Tou have to convert your output in #LIST\_FORMAT.**

**# ['2020-04-13', '17:11:01.952975']**

**# You can use this with the help of if/else statement.**

IN[]:

import datetime

str(datetime.datetime.now()).split(' ')

OUT[]:

['2020-05-09', '23:57:00.247168']

IN []:

import datetime

import time

time\_ = datetime.datetime(2020, 5, 1, 2, 57, 0)

while datetime.datetime.now() < time\_:

time.sleep(1)

print("Hello! It’s time for execution!!!")

OUT []:

Hello! It’s time for execution!!!

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**4. Given a tuple:**

**tuple\_ = ('a', 'l', 'g', 'o', 'r', 'i', 't', 'h', 'm')**

**#Using the concept of slicing , print the whole tuple.**

**# Delete the element at the third index , print the tuple**

IN[]:

tuple\_ = ('a', 'l', 'g', 'o', 'r', 'i', 't', 'h', 'm')

list(tuple\_[0:])

OUT[]:

['a', 'l', 'g', 'o', 'r', 'i', 't', 'h', 'm']

IN[]:

tuple\_ = ('a', 'l', 'g', 'o', 'r', 'i', 't', 'h', 'm')

delete = list(tuple\_)

delete.remove(delete[3])

tuple(delete)

OUT[]:

('a', 'l', 'g', 'r', 'i', 't', 'h', 'm')

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**5. Take a list:**

**REGEX = [1,2,3,4,5,6,7,8,9,0,77,44,15,33,65,89,12]**

**# Print only those who are greater than 20.**

**# Then print those numbers who are less than 10 or equal to 10.**

**# Store the above 2 lists in 2 different list.**

IN[]:

REGEX = [1,2,3,4,5,6,7,8,9,0,77,44,15,33,65,89,12]

list1 = []

list2 = []

for i in REGEX:

if i > 20:

list1.append(i)

if i <= 10:

list2.append(i)

print('no. greater than 20\n', list1)

print('no. greater than and equals to 10\n', list2)

OUT[]:

no. greater than 20

[77, 44, 33, 65, 89]

no. greater than and equals to 10

[1, 2, 3, 4, 5, 6, 7, 8, 9, 0]

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**6. Execute standard linux commands using python programming.**

IN[]:

import os

name = input('enter name \n')

os.mkdir(name)

print('directory created')

OUT[]:

enter name

dire1

directory created

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**7. Revise \*args and \*\*kwargs concepts.**

The special syntax \*args in function definitions in python is used to pass a variable number of arguments to a function.

It is used to pass a non-keyworded, variable-length argument list.

The special syntax \*\*kwargs in function definitions in python is used to pass a keyworded, variable-length argument list. We use the name kwargs with the double star.

The reason is because the double star allows us to pass through keyword arguments (and any number of them)