**ASSIGNMENT-1**

**TEAM ID: PNT2022TMID52462**

\_\_\_\_Basic Python\_\_\_\_

1. Split this string

s = "Hi there Sam!" s.split()

2. Use .format() to print the following string.

Output should be: The diameter of Earth is 12742 kilometers. planet = "Earth" diameter = 12742

print("The diameter of {} is {} kilometers".format(planet,diameter))

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NameError Traceback (most recent call last)

in

----> 1 print("The diameter of {} is {} kilometers".format(planet,diameter))

NameError: name 'planet' is not defined

3. In this nest dictionary grab the word "hello"

d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]} print(d['k1'][3]['tricky'][3]['target'][3])

Numpy

import numpy as np

4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

array = np.zeros(10) print(array)

[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.] array = np.ones(5)\*5

5.Create an array of all the even integers from 20 to 35 array = np.arange(20,36,2)

6.Create a 3x3 matrix with values ranging from 0 to 8 array = np.arange(0,9).reshape(3,3)

7. Concatinate a and b

a = np.array([1, 2, 3]), b = np.array([4, 5, 6])

a= np.array([1,2,4]) b= np.array([4,5,6])

c = np.concatenate((a,b))

Pandas

8. Create a dataframe with 3 rows and 2 columns import pandas as pd lst = [[100],[200]]

df = pd.DataFrame(lst,columns = ["g"]) print(df)

g

1. 100
2. 200

9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023 per1 = pd.date\_range(start ='1-1-2023', end ='2-10-2023') for val in per1:

print(val)

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2023-01-02 00:00:00

2023-01-03 00:00:00

2023-01-04 00:00:00

2023-01-05 00:00:00

2023-01-06 00:00:00

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10. Create 2D list to DataFrame

lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]

lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]] df = pd.DataFrame(lists,columns =['key','values','numbers'])