ASSIGNMENT-1

# -\*- coding: utf-8 -\*-

""" Assignment\_1.ipynb

Automatically generated by Colaboratory.

Original file is located at

https://colab.research.google.com/drive/1Dcf\_wtZ1rye4QPuKcBYNIDBVcW7kjYq3

# Basic Python

## 1. Split this string

"""

s = "Hi there Sam!"

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

planet = "Earth"

diameter = 12742

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

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

"""

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

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

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?

"""

ar = np.zeros(10)

ar

ar1 = np.ones(10)\*5

ar1

"""## 5. Create an array of all the even integers from 20 to 35"""

a = np.arange(20,36,2)

a

"""## 6. Create a 3x3 matrix with values ranging from 0 to 8"""

l1 = [[0,1,2],[3,4,5],[6,7,8]]

arr = np.array(l1)

arr

"""## 7. Concatinate a and b

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

"""

a = np.array([1,2,3])

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

output = np.concatenate((a,b),axis=0)

print(output)

"""# Pandas

## 8. Create a dataframe with 3 rows and 2 columns

"""

import pandas as pd

k1={"shapes":["circle","square","triangle"],"size":[2,4,6]}

df = pd.DataFrame(k1)

print(df)

"""## 9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023"""

dates = pd.date\_range(start='1-1-2023',end='2-10-2023')

# also can do with for val in dates: #print(val)

print(dates)

"""## 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=['numbers','names','age'])

print(df)