# **IBM ASSIGNMENT -BATCH AI - 1**

1. string = "Hi there Sam ";

print (string split())

output=['Hi', 'there', 'sam']

2.plant ="Earth"

diameter= 12742

print('The diameter of {} is {} kilometer'. format (plan ef, diameter));

output:the dimeter of the earth is 12742 kilometer

3.d = {'k',[1,2,3,{'trichy'['oh','man','inception', { 'target'[1,2,3,'hello']}]}]}

print(d['k1'][3]["trichy"][3]['target'][3])

output=hello

4a).import numpy as np

array=np.zeros(10)

print("An array of 10zero")

print(array)

output= [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]

4b) import numpy as np

array=np.five(10)\*5

print("An array of 10 five: ")

print(array)

output = [5. 5. .5 .5 .5 .5 .5 .5 .5 .5 ]

5)import numpy as np

array=np.arrange(20,35,2)

print("Array of all the even integer from 20 to 35")

print(array)

output= 20,22,24,25,26,28,30,32,34.

6) import numpy as np

x = np.arrange (0,9)reshape(3,3)

print(x)

output [ [0 ,1 ,2]

[3 ,4 ,5]

[6 ,7 ,8]]

7) import numpy as np

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

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

c = np. concatenate((a,b,),1)

print(c)

output=[[1,2,3]

[4,5,6]]

8)import pandas as pd

data=['Name'['tom', 'nick', 'krish', 'jack'], Age:[20,21,19,18]

df=pd.Dataframe(data)

df

output=

Name Age

0 Tom 20

1 nick 21

2 krish 19

3 Jack 18

9) from datetime import timedelta, date

def daterange (date1,date2);

for n if in\_ range (int((date2-date).days)+1`):

yield date1+ timedelta(n)

start\_dt=date(2023,1,1)

end\_dt=date=date(2023,10,2)

for dt in daterange(start\_dt,end\_dt);

print9dt.strftime("yy-%m-%d"))

output=1st jan 2023

10th feb 2023

10)import pandas as pd

import numpy as np

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

data=pd.dataframe(li)

print(data)

output=1 aaa 21

2 bbb 2.5

3 ccc 24