Assignment -1

Python Programming

Assignment Date	16 September 2022
Student Name	V. Sumathi
Student Roll Number	713119104019
Maximum Marks	2 Marks

BASIC PYTHON

1.Split this string

```
#Split this string s
= "Hi there Sam!"
s.split()
```

OUTPUT

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

Output should be:
The diameter of earth is 12742 kilometres.

```
planet = "Earth"
diameter = 12742 planet
= "Earth" diameter =
12742
print('The diameter of {} is {} kilometres.'. Format(planet,diameter));
```

OUTPUT

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']}
]}]} print(d['k1'][3]["tricky"][3]['target'][3])
```

OUTPUT

4.Numpy

4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

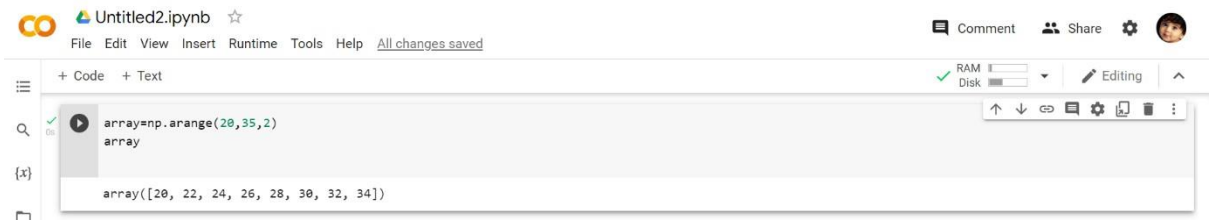
```
4.1 array=np.zeros(10)
    Array

4.2 array=np.ones(10)*5
    Array
```

OUTPUT

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

```
array=np.arange(20,35,2) array
```

OUTPUT



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

```
matrix=np.arange(0,9).reshape(3,3) matrix
```

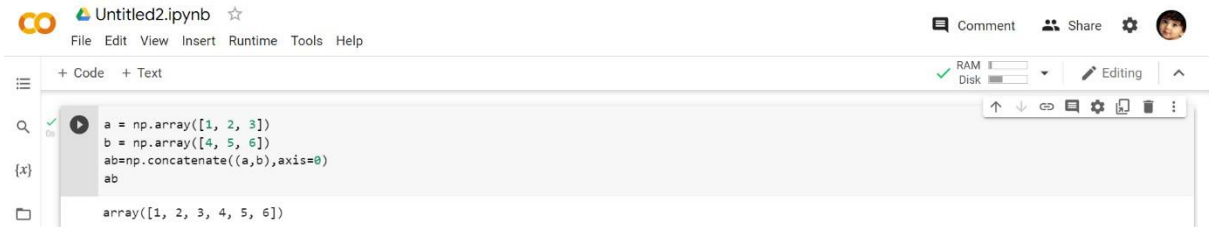
OUTPUT

7. Concatenate 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])
ab=np.concatenate((a,b),axis=0)
ab
```

OUTPUT



Pandas

8. Create a dataframe with 3 rows and 2 columns

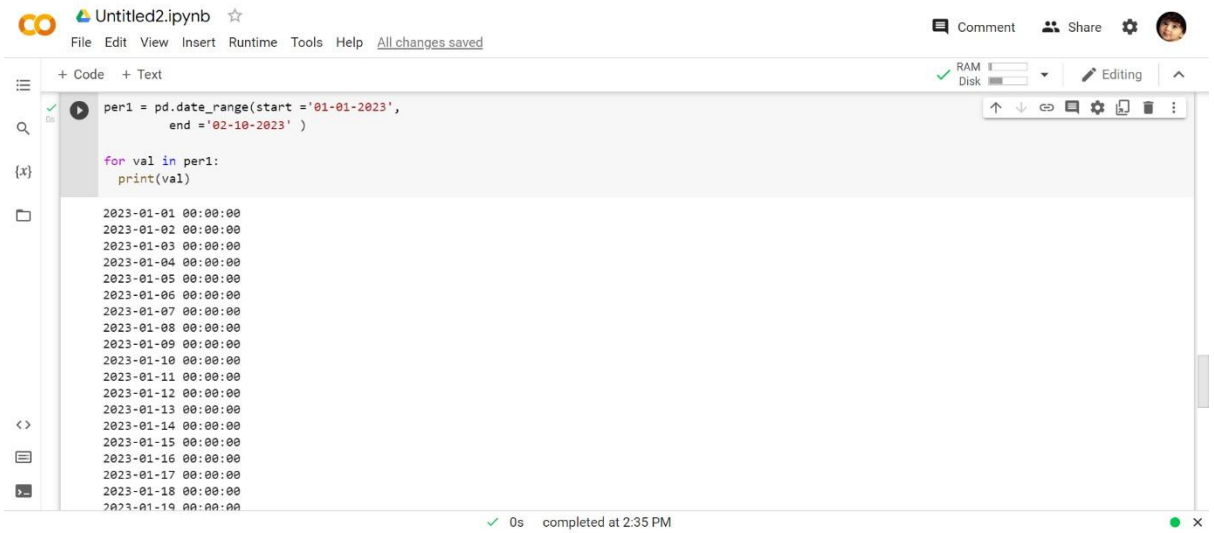
```
import pandas as pd data = [['vb', 10], ['hari',
15], ['prasath', 14]] df = pd.DataFrame(data,
columns=['Name', 'Age']) df
```

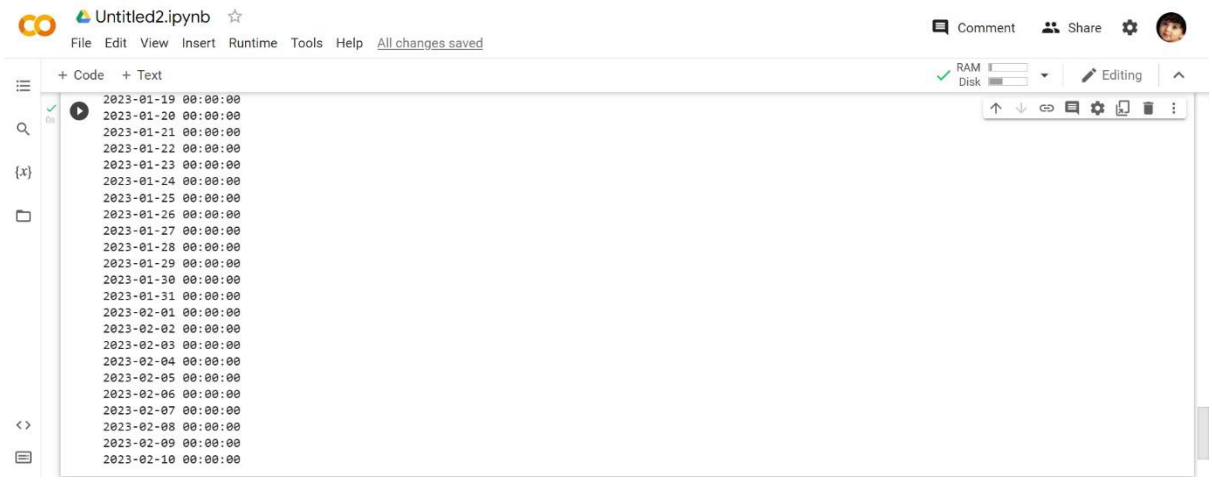
OUTPUT

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

```
per1 = pd.date_range(start ='01-01-2023',          end ='02-10-2023' )
   for val in
per1:
print(val)
```

OUTPUT





10. Create 2D list to DataFrame

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

In [35]:

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

In [58]:

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

# Create the pandas DataFrame df = pd.DataFrame(lists,
columns = ['s.no','name','Age'])

# print dataframe.
print(df )
```

OUTPUT