ASSIGNMENT

Python Programming

Assignment Date	29 September 2022
Student Name	M.SHEHHA
Student Roll Number	E1194034
Maximum Marks	2 Marks

QUESTIONS:

1. Split this string

```
#1. Split this string

[1]: s = "Hi there Sam!"

[2]: print(s.split())
    ['Hi', 'there', 'Sam!']
```

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

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

In [3]: planet = "Earth"
    diameter = 12742

In [4]: "The diameter of {} is {} kilometer".format(planet,diameter)
Out[4]: 'The diameter of Earth is 12742 kilometer'
```

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

```
In [6]: d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}
In [13]: d['k1'][3]['tricky'][3]['target'][3]
Out[13]: 'hello'
```

- 4.Numpy
- 4.1 Create an array of 10 zeros?
- 4.2 Create an array of 10 fives?

```
In [15]: arr=np.zeros(10)
    print(arr)

[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]

In [16]: arr=np.ones(10)*5
    print(arr)

[5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
```

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

```
In [20]: arr=np.arange(20,36,2)
    arr=np.array(arr)
    print(arr)

[20 22 24 26 28 30 32 34]
```

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

7. Concatinate a and b

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

```
In [7]: a=np.array([1,2,3])
b=np.array([4,5,6])
c=a+b
|
Out[7]: array([5, 7, 9])
```

Pandas

8. Create a dataframe with 3 rows and 2 columns

```
In [16]: import pandas as pd

In [17]: data={'name':['rasi','nivi','sowmi'],'age':[20,22,21]}
    df=pd.DataFrame(data)
    df
```

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

```
In [18]: dates=pd.date_range('01-01-2023',periods=41,freq='D')
    df=pd.DataFrame(dates)
    df
```

Out[18]:

0

- 0 2023-01-01
- **1** 2023-01-02
- 2 2023-01-03
- 3 2023-01-04
- 4 2023-01-05
- **5** 2023-01-06

- 2023-01-14
- 2023-01-15
- 2023-01-16
- 2023-01-17
- 2023-01-18
 - 2023-02-02
 - 2023-02-03
 - 2023-02-04
 - 2023-02-05
 - 2023-02-06
 - 2023-02-07
 - 2023-02-08
 - 2023-02-09
 - 40 2023-02-10

10. Create 2D list to DataFrame

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

```
In [20]: lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
In [21]: df=pd.DataFrame(lists ,columns=['s,no','members','age'])
df
```

Out[21]:

	s,no	members	age
0	1	aaa	22
1	2	bbb	25
2	3	ccc	24