ASSIGNMENT -1 Python programming

Assignment Date	19 September 2022
Student Name	R.sneha
Student Roll Number	912619104027
Maximum Marks	2 Marks

1.Split the string

Solution:

```
[ ] s ="hi there sam !"
[ ] s ="hi there sam !"
    a = s.split()
    print(a)
['hi', 'there', 'sam', '!']
```

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

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

Solution:

```
[ ] planet = "Earth"
    diameter = 12742

[ ] print(" The diameter of {} is {} Kilometers.".format(planet,diameter))
```

The diameter of Earth is 12742 Kilometers.

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

Solution:

- 4.1 Create an array of 10 zeros?
- 4.2 Create an array of 10 fives?

Solution:

```
a=np.zeros(10)
a
array([0., 0., 0., 0., 0., 0., 0., 0., 0., 0.])

[] b=np.ones(10)*5
b
array([5., 5., 5., 5., 5., 5., 5., 5., 5.])
```

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

Solution:

```
[] s=np.arange(20,35,2)
s
array([20, 22, 24, 26, 28, 30, 32, 34])
```

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

Solution:

7. Concatenate a and b

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

solution:

```
[] a=np.array([1, 2, 3])
b=np.array([4, 5, 6])
np.concatenate((a,b),axis=0)
array([1, 2, 3, 4, 5, 6])
```

8. Create a dataframe with 3 rows and 2 columns

```
import pandas as pd
```

```
d={"names":["dharsu","keeri","abi"],"age":[20,19,20]}
df=pd.DataFrame(d)
df
```

	names	age
0	dharsu	20
1	keeri	19
2	abi	20

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

```
p=pd.date_range(start='1-1-2023',end='10-2-2023')
for val in p:
    print(val);

2023-01-01 00:00:00
2023-01-02 00:00:00
2023-01-03 00:00:00
```

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10. Create 2D list to DataFrame

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

Solution:

2 3 ccc 24