ASSIGNMENT -1
Python programming

Assignment Date	19 September 2022
Student Name	R.ROOPINA
Student Roll Number	912619104021
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:

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

```
[ ] d['k1'][3]['tricky'][3]['target'][3]

    'hello'
```

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.])
```

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:

```
[ ]  array =np.arange(0,9).reshape(3,3)
     array
```

```
array([[0, 1, 2],
       [3, 4, 5],
       [6, 7, 8]])
```

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

Solution:

```
1]  import pandas as pd
```

```
d={"names":["helan","ranjani","roopina",],"age":[20,20,21]}
df=pd.DataFrame(d)
df
```

	names	age
0	helan	20
1	ranjani	20
2	roopina	21

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);
```

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10. Create 2D list to DataFrame

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

Solution:

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

```
[ ]  df =pd.DataFrame(lists)
     df
```

	0	1	2
0	1	aaa	22
1	2	bbb	25
2	3	ccc	24