

ASSIGNMENT -1
Python programming

Assignment Date	19 September 2022
Student Name	S.Abinaya
Student Roll Number	912619104301
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


```
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);
```

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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