

Assignment -1

Assignment Date	15 November 2022
Student Name	Sangeetha M
Student Roll Number	412419104101
Maximum Marks	2 Marks

PYTHON

1. split this string

```
s= "Hi there sam!"
```

In [1]:

```
s.split()
```

In [2]:

```
['Hi', 'there', 'sam!']
```

Out[2]:

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

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

```
planet ="Earth"  
diameter = 12742
```

In [3]:

```
print("The diameter of{}is{} kilometer.".format(planet,diameter))  
The diameter ofEarthis12742 kilometer.
```

In [7]:

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

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

In [9]:

```
In [10]:  
d['k1'][3]['tricky'][3]['target'][3]  
Out[10]:  
'hello'
```

Numpy

```
import numpy as np
```

In [11]:

```
4.1 #Create an array of 10 zeros?  
array = np.zeros(10)
```

In [17]:

```
print(array)
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

In [21]:

```
4.1 #create an array of 10 fives?
array=np.ones(10)*5
print(array)

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

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

In [22]:

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

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

In [34]:

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

In [14]:

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

Out[14]:

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

pandas

8.Create a dataframe with 3 rows and 2 columns

In [15]:

```
import pandas as pd
```

In [18]:

```
df = {"name":["mohana","sri","ammu"],"age":[21,20,23]}
```

In [21]:

```
df = pd.DataFrame(df)
```

df

Out[21]:

	name	age
0	mohana	21
1	sri	20
2	ammu	23

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

In [23]:

```
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
2023-01-04 00:00:00
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10.Create 2D list to DataFrame

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

In [26]:

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

In [27]:

```
df = pd.DataFrame(list)
df
```

Out[27]:

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

In [:]: