

# ASSIGNMENT - 1

## PYTHON

### 1. split this string

```
s= "Hi there sam!"  
  
s.split()  
  
['Hi', 'there', 'sam!']
```

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

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

```
planet = "Earth"  
diameter = 12742  
  
print("The diameter of{}is{} kilometer.".format(planet,diameter))  
  
The diameter ofEarthis12742 kilometer.
```

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

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

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

## Numpy

```
import numpy as np  
  
4.1 #Create an array of 10 zeros?  
array = np.zeros(10)  
print(array)  
  
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

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

```
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

```
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])
```

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

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

## pandas

## 8.Create a dataframe with 3 rows and 2 columns

```
import pandas as pd
```

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

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

```
df
```

```
   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

```
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]]
```

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

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

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