

CMS COLLEGE OF ENGINEERING AND TECHNOLOGY
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING.

DETECTING PARKINSONS DISEASE (ASSIGNMENT 1)

DATE _____ : 26-09-2022

PROBLEM : TO ANSWER THE QUESTIONS FOR THE ANSWERS

NAME : MUHAMMED MUSAMMIL KP

OUTPUT :

SCREENSHOTS:

Basic Python

1. Split this string

```
In [1]: s = "Hi there Sam!"
In [2]: s.split()
Out[2]: ['Hi', 'there', 'Sam!']
```

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

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

```
In [3]: planet = "Earth"
        diameter = 12742
In [5]: 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"

```
In [6]: d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}
```

```
In [8]: d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}
```

```
print(d['k1'][3]['tricky'][3]['target'][3])
```

hello

Numpy

```
In [9]: import numpy as np
```

4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

```
In [11]: array=np.zeros(10)
```

array

```
Out[11]: array([0., 0., 0., 0., 0., 0., 0., 0., 0., 0.])
```

```
In [12]: array=np.ones(10)*5
```

array

```
Out[12]: 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 [13]: array=np.arange(20,35,2)
```

array

```
Out[13]: array([20, 22, 24, 26, 28, 30, 32, 34])
```

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

```
In [21]: matrix=np.arange(0,9).reshape(3,3)
```

matrix

```
Out[21]: array([[0, 1, 2],
```

[3, 4, 5],

[6, 7, 8]])

```
In [ ]:
```

7. Concatenate a and b

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

```
In [24]: a = np.array([1, 2, 3])
```

b = np.array([4, 5, 6])

ab=np.concatenate((a,b),axis=0)

ab

```
Out[24]: array([1, 2, 3, 4, 5, 6])
```

Pandas

8. Create a dataframe with 3 rows and 2 columns

```
In [3]: import pandas as pd
```

```
In [4]: data = [['vignesh', 50], ['santhanam', 40], ['giri', 25]]
df = pd.DataFrame(data, columns=['Name', 'Age'])
df
```

```
Out[4]:
```

	Name	Age
0	vignesh	50
1	santhanam	40
2	giri	25

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

```
In [51]: venkat = pd.date_range(start='01-01-2023',
                                end='02-10-2023')
```

```
for val in venkat:
    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
2023-01-05 00:00:00
2023-01-06 00:00:00
```

```
2023-02-05 00:00:00
2023-02-06 00:00:00
2023-02-07 00:00:00
2023-02-08 00:00:00
2023-02-09 00:00:00
2023-02-10 00:00:00
```

10. Create 2D list to DataFrame

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

```
In [5]: lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
```

```
In [7]: lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]

# Create the pandas DataFrame
df = pd.DataFrame(lists, columns = ['s.no', 'name', 'Age'])

# print dataframe.
print(df)
```

	s.no	name	Age
0	1	aaa	22
1	2	bbb	25
2	3	ccc	24

```
In [ ]:
```

*****THANKING YOU*****