

UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

ASSIGNMENT - 1

Date	13th September 2022
Team ID	PNT2022TMID54388
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Domain Name	Education
Project Name	University Admit Eligibility Predictor
Maximum Marks	2 Marks

1.)SPLIT THE STRING

1. Split this string

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

2.)USE .format() TO PRINT THE FOLLOWING STRING

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

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

```
In [3]: planet = "Earth"  
        diameter = 12742  
        txt = 'The diameter of {planet} is {diameter} kilometers.'  
In [4]: txt.format(planet=planet,diameter=diameter)  
Out[4]: 'The diameter of Earth is 12742 kilometers.'
```

3.)IN THE NEST DICTIONARY GRAB THE WORD “HELLO”

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

```
In [5]: d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]]}]  
In [6]: d['k1'][3]['tricky'][3]['target'][3]  
Out[6]: 'hello'
```

4.) NUMPY

1.) CREATE AN ARRAY OF 10 ZEROS

2.) CREATE AN ARRAY OF 10 FIVES

Numpy

```
In [7]: import numpy as np
```

4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

```
In [8]: np.zeros(10)
```

```
Out[8]: array([0., 0., 0., 0., 0., 0., 0., 0., 0., 0.])
```

```
In [9]: np.ones(10)*5
```

```
Out[9]: array([5., 5., 5., 5., 5., 5., 5., 5., 5., 5.])
```

5.)CREATE ARRAY OF ALL THE EVEN INTEGERS FROM 20 to 35

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

```
In [10]: np.arange(20,35,2)
```

```
Out[10]: array([20, 22, 24, 26, 28, 30, 32, 34])
```

6.)CREATE A 3x3 MATRIX WITH VALUES FROM 0 to 8

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

```
In [11]: np.arange(9).reshape(3,3)
```

```
Out[11]: array([[0, 1, 2],
                [3, 4, 5],
                [6, 7, 8]])
```

7.)CONCATENATE a AND b

7. Concatenate a and b

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

```
In [12]: a = np.array([1, 2, 3])
b = np.array([4, 5, 6])
c = np.concatenate([a,b])
c
```

```
Out[12]: array([1, 2, 3, 4, 5, 6])
```

8.) PANDAS

CREATE A DATAFRAME WITH 3 ROWS AND 2 COLUMNS

Pandas

8. Create a dataframe with 3 rows and 2 columns

```
In [13]: import pandas as pd
df = pd.DataFrame({'name':['Prem','John','Steve'],'Role':['Android Developer','Full Stack Developer','Software Developer']})
```

```
In [14]: df
```

```
Out[14]:
```

	name	Role
0	Prem	Android Developer
1	John	Full Stack Developer
2	Steve	Software Developer

9.) GENERATE THE SERIES OF DATES

FROM 1st JAN 2023 TO 10th FEB 2023

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

```
In [15]: df = pd.DataFrame(pd.date_range('01-01-2023','02-10-2023'))
df
```

```
Out[15]:
```

	0
0	2023-01-01
1	2023-01-02
2	2023-01-03
3	2023-01-04
4	2023-01-05
5	2023-01-06
6	2023-01-07
7	2023-01-08
8	2023-01-09
9	2023-01-10
10	2023-01-11
11	2023-01-12
12	2023-01-13
13	2023-01-14
14	2023-01-15
15	2023-01-16
16	2023-01-17
17	2023-01-18

```
18 2023-01-19
19 2023-01-20
20 2023-01-21
21 2023-01-22
22 2023-01-23
23 2023-01-24
24 2023-01-25
25 2023-01-26
26 2023-01-27
27 2023-01-28
28 2023-01-29
29 2023-01-30
30 2023-01-31
31 2023-02-01
32 2023-02-02
33 2023-02-03
34 2023-02-04
35 2023-02-05
36 2023-02-06
37 2023-02-07
38 2023-02-08
39 2023-02-09
40 2023-02-10
```

10.) CREATE 2D LIST TO DATAFRAME

10. Create 2D list to DataFrame

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

```
In [16]: lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
```

```
In [17]: pd.DataFrame(lists)
```

```
Out[17]:
```

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