UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

ASSIGNMENT - 1

Date	13th September 2022
Team ID	PNT2022TMID27839
Student Name	Prem B (311519104047)
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.])

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

Out[9]: array([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

7.) CONCATENATE a AND b

```
7. Concatenate a and b

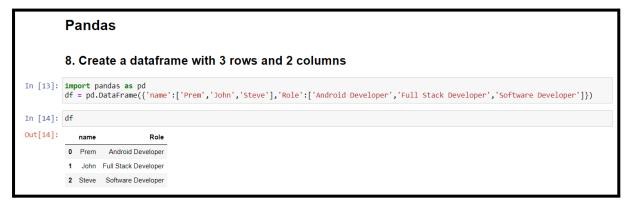
a = np.array([1, 2, 3]), b = np.array([4, 5, 6])

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



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'))
Out[15]:
         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
         11 2023-01-12
         12 2023-01-13
         13 2023-01-14
         14 2023-01-15
         15 2023-01-16
         16 2023-01-17
```

```
18 2023-01-19
 19 2023-01-20
20 2023-01-21
21 2023-01-22
22 2023-01-23
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