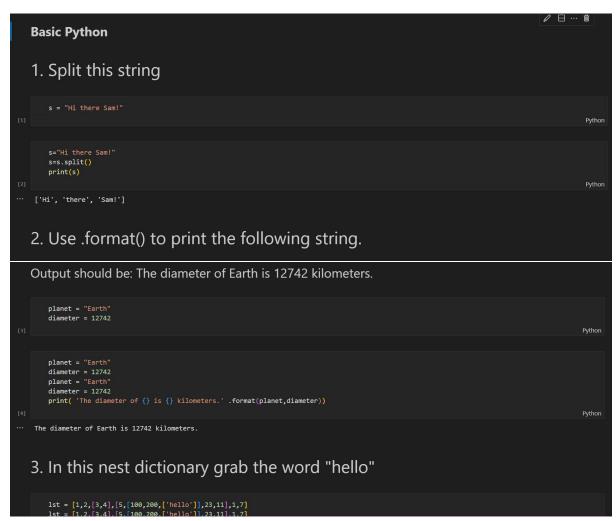
Assignment -1

Python Programming

Assignment Date	19 September 2022
Student Name	K.Jayachandran
Student Roll Number	210519205016
Maximum Marks	2 Marks

Question-1:



```
a=lst[3][1][2]
print(a)
··· ['hello']
   Numpy
        import numpy as np
   4.1 Create an array of 10 zeros?
   4.2 Create an array of 10 fives?
       import numpy as np
array=nn_zeros(10)
import numpy as np
array=np.zeros(10)
       array=mp.zeros(10)
print("An array of 10 zeros:")
print(array)
array=np.ones(10)*5
print("An array of 10 fives:")
print(array)
    [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
An array of 10 fives:
   5. Create an array of all the even integers from 20 to 35
       import numpy as np
array=np.arange(20,36,2)
print("Array of all the even integers from 20 to 35")
print(array)
    Array of all the even integers from 20 to 35
    [20 22 24 26 28 30 32 34]
   6. Create a 3x3 matrix with values ranging from 0 to 8
        import numpy as np
x = np.arange(0, 9).reshape(3,3)
print(x)
     [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
      b = np.array([4, 5, 6])
print(b)
  [4 5 6]
 Pandas
8. Create a dataframe with 3 rows and 2 columns
      import pandas as pd
      import numpy as np
a=np.array([1,2,3])
      b=np.array([4,5,6])
np.concatenate((a,b),axis=0)
array([1, 2, 3, 4, 5, 6])
9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023
      pd.date_range(start='01/01/2023',end='02/10/2023')
 DatetimeIndex(['2023-01-01', '2023-01-02', '2023-01-03', '2023-01-04', '2023-01-05', '2023-01-06', '2023-01-07', '2023-01-08',
                     '2023-01-09', '2023-01-10', '2023-01-11', '2023-01-12', '2023-01-13', '2023-01-14', '2023-01-15', '2023-01-16',
                     '2023-01-17', '2023-01-18', '2023-01-19', '2023-01-20', '2023-01-21', '2023-01-22', '2023-01-23', '2023-01-24',
                     2023-01-21, 2023-01-22, 2023-01-23, 2023-01-24, 2023-01-25', 2023-01-26', 2023-01-27', 2023-01-28', 2023-01-29', 2023-01-30', 2023-01-31', 2023-02-01', 2023-02-02', 2023-02-03', 2023-02-04', 2023-02-05', 2023-02-06', 2023-02-07', 2023-02-08', 2023-02-09',
                    dtype='datetime64[ns]', freq='D')
 10. Create 2D list to DataFrame
lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
     import pandas as pd
lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
```