ASSIGNMENT – 1

\# Basic Python

1. Split this string

" s = "Hi there

Sam!"

print(s.split())

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 {}
kilometers".format(planet,diameter))

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

d =

{'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello
']}]}]} print(d['k1'][3]['tricky'][3]['target'][3])

import numpy as np

4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

```
np.zeros(10)
np.ones(10)*5
```

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

```
np.array([int(i) for i in range(20,35,2)])
```

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

```
np.arange(0, 9).reshape(3,3)
```

7. Concatenate a and b

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

8. Create a dataframe with 3 rows and 2 columns

```
import pandas as pd
pd.DataFrame({0:[1]*3,1:[1]*3})
```

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

pd.date_range(start="01/01/2023",end="10/02/2023")

10. Create 2D list to DataFrame lists

= [[1, 'aaa', 22],   [2, 'bbb', 25],

    [3, 'ccc', 24]]

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

24]]

pd.DataFrame(lists)