Basic Python

1. Split this string

In [1]:

s = "Hi there Swetha!"

In [2]:

['hi' , 'there', 'swetha!']

Output [2]:

['hi', 'there', 'swetha!']

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 [9]:

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 [10]:

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

In [11]:

d ['k1'] [3] ['tricky'] [3] ['target'] [3]

Output [11]:

'hello'

Numpy

In [12]:

import numpy **as** np

4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

In [13]:

np.zeros (10)

Output [13]:

array([0., 0., 0., 0., 0., 0., 0., 0., 0., 0.])

In [14]:

np.ones(10) *5

Output [14]:

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 [15]:

Print (np.arange (20, 35, and 2))

[20 22 24 26 28 30 32 34]

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

In [16]:

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

Output [16]:

array ([[0, 1, 2],

[3, 4, 5],

[6, 7, 8]])

7. Concatenate a and b

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

In [17]:

Print ('\n----Results of a ([123]) and b ([456]) ---')

----Results of a ([123]) and b ([456]) ---

Pandas

8. Create a data frame with 3 rows and 2 columns

In [18]:

Import pandas **as** pad

In [19]:

dt = {'Name': {‘swetha’,’afreen’,'sivasakthi'}, ‘age’: {‘20’,’05’,'19'}}

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

In [20]:

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

10. Create 2D list to Data Frame

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

In [21]:

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

In [22]:

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

In [26]:

```
lists={"s.no": [1,2,3], "name":['aaa','bbb','ccc'], "value":[22,25,24]  }
```

In [27]:

```
pd.DataFrame(lists)
```

Output [27]:

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

In [28]:

```
pd.DataFrame (lists, index= ["A","B","C"])
```

Output [28]:

	s.no	name	value
A	1	aaa	22
B	2	bbb	25

	s.no	name	value
C	3	ccc	24

In [ ]: