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| Assignment Date | 23 September 2022 |
| Student Name | Pavithra K |
| Student Roll Number | 61772021T306 |
| Maximum Marks | 2 Marks |

**Question-1:**

Split the String

s = "Hi there Sam!"

**Solution**:

s.split()

**Basic Python**

**1. Split this string**

```
In [ ]: s = "Hi there Sam!"

In [ ]: s.split()

Out[4]: ['Hi', 'there', 'Sam!']
```

**Question-2:**

Use .format() to print the following String

Output should be: The Diameter of Earth is 12742 Kilometers

**Solution :**

planet = "Earth"

diameter = 12742

print('The diameter of {} is {} kilometers.' . format(planet,diameter));

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

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

```
In [ ]: planet = "Earth"
        diameter = 12742

In [ ]: print('The diameter of {} is {} kilometers.' . format(planet,diameter));
        The diameter of Earth is 12742 kilometers.
```

**Question-3:**

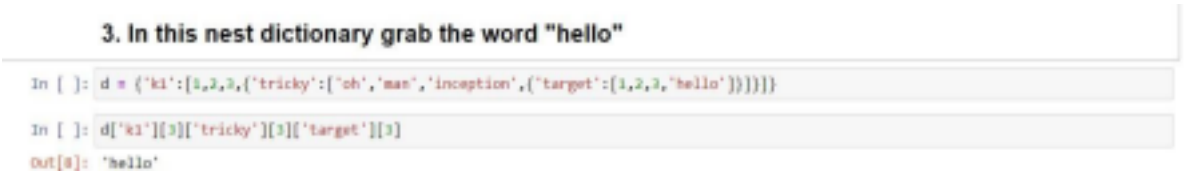
In this nest dictionary grab the word “hello”

**Solution :**

d =

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

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




**Question-4:**

Create an array of 10 zeros?

Create an array of 10 Fives?

**Solution :**

import numpy as np

a = np.zeros(10)a

tmp=np.ones(10)*5

print(tmp)




**Question-5:**

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

**Solution :**

print(np.arange(20,35,2))

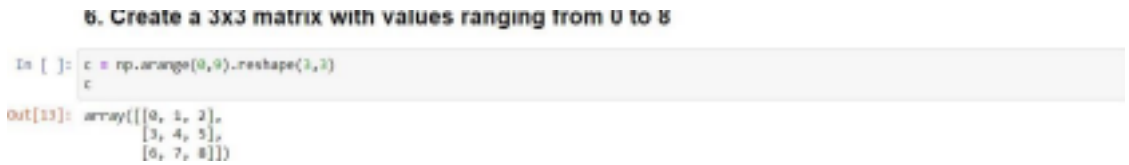

**Question-6:**

Create a 3*3 matrix with values raging from 0 to 8

**Solution:**

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

c




**Question-7:**

Concatenate a and b

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

**Solution:**

a = np.array([1,2,3])

b = np.array([4,5,6])

np.concatenate((a,b),axis=0)




**Pandas**

**Question-8:**

Create a DataFrame with 3 rows and 2 columns

**Solution:**

```
import pandas as pd
d =
{"fruits":["mango","orange","apple"],"color":["yellow","orange","red"]} df
= pd.DataFrame(d)
df
```


**Question-9:**

Generate the series of dates from 1st Jan,2023 to 10th feb,2023

**Solution:**

```
dates = pd.date_range(start='1/1/2023',end='2/10/2023')
lists = []
for i in dates:
lists.append(i.strftime('%d-%m-%y'))
print(lists)
```




**Question-10:**

Create 2D list to DataFrame

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

**Solution:**

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

### 10. Create 2D list to DataFrame ¶

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

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

In [ ]:
```
df = pd.DataFrame(lists)
df
```

Out[20]:

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