Assignment - 1
BASIC PYTHON

Assignment Date	12.09.2022
Student Name	Srividhya V
Student Roll Number	2019115106
Maximum Marks	2 Marks

Question-1
Split this string
s = "Hi there Sam!"

Solution:
print(s.split())

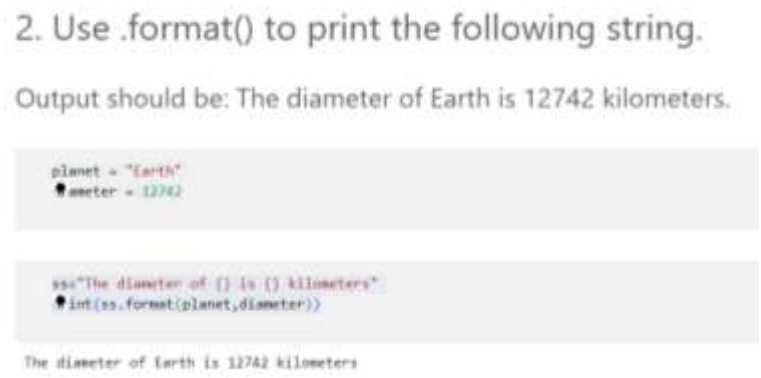
Screenshot:

Question-2
Use .format() to print the following string.

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

Solution:
planet = "Earth"
diameter = 12742
ss="The diameter of {} is {} kilometers"
print(ss.format(planet,diameter))

Screenshot:



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']}]}]}
print(d['k1'][3]["tricky"][3]['target'][3])
```

Screenshot:

Numpy

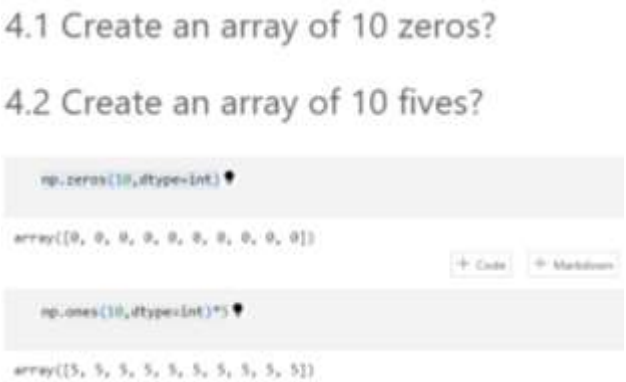
Question-4

4.1 Create an array of 10 zeros?
4.2 Create an array of 10 fives?

Solution:

```
import numpy as np
np.zeros(10,dtype=int)
np.ones(10,dtype=int)*5
```

Screenshot:



Question-5

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

Solution:

```
np.arange(20,36,2)
```

Screenshot:

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

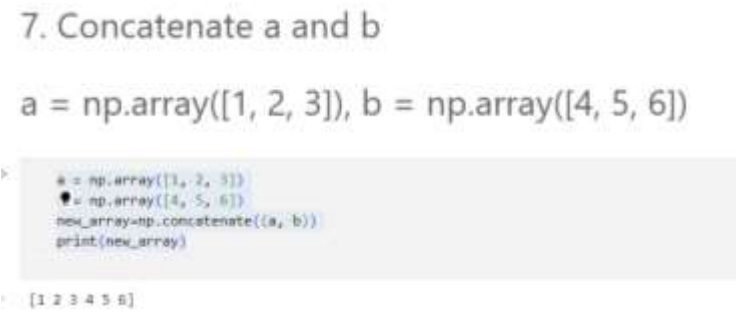
Solution:
np.arange(0, 9).reshape(3,3)

Screenshot:

Question-7
Concatenate a and b
a = np.array([1, 2, 3]), b = np.array([4, 5, 6])

Solution:
a = np.array([1, 2, 3])
b = np.array([4, 5, 6])
new_array=np.concatenate((a, b))
print(new_array)

Screenshot:



Pandas

Question-8
Create a dataframe with 3 rows and 2 columns

Solution:

```
import pandas as pd
```

```
data = [['Riya',106], ['Arjun', 116],['Ramu',119]]
df=pd.DataFrame(data)
print(df)
```

Screenshot:

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

Solution:
mydates = pd.date_range('2023-01-01', '2023-02-10')
print(mydates)

Screenshot:

Question-10
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]]
df=pd.DataFrame(lists)
print(df)

Screenshot:


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]]
df=pd.DataFrame(lists)
print(df)
0 1 2
0 1 aaa 22
1 2 bbb 25
2 3 ccc 24