Assignment -1

Python Programming

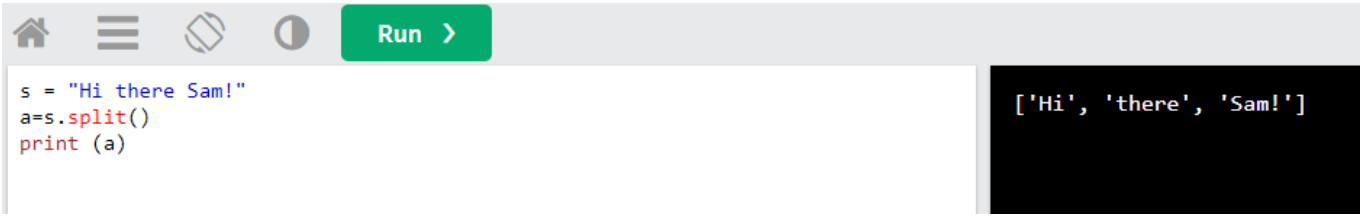
Assignment Date	16 September 2022
Student Name	Ms B.Varshini Bala
Student Roll Number	113219071046
Maximum Marks	2 Marks

Question-1:

Split this string

Solution:

```
s = "Hi there Sam!"
a=s.split()
print (a)
```



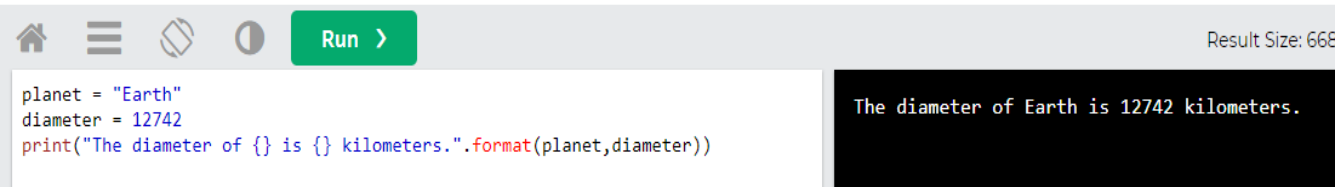
Question-2:

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))
```

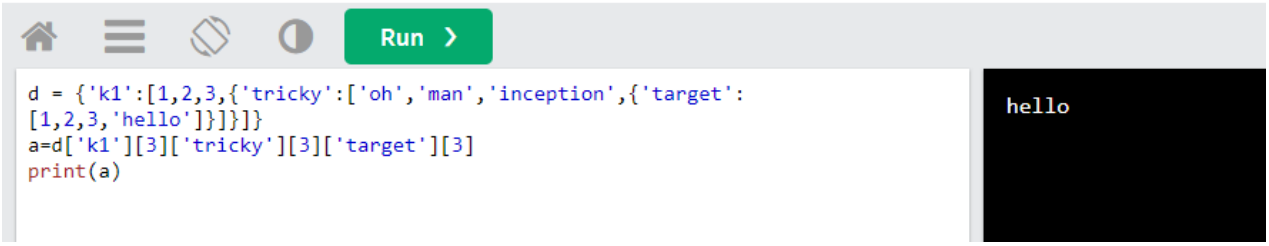

Run
Result Size: 668
planet = "Earth"
diameter = 12742
print("The diameter of {} is {} kilometers.".format(planet,diameter))
The diameter of Earth is 12742 kilometers.

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



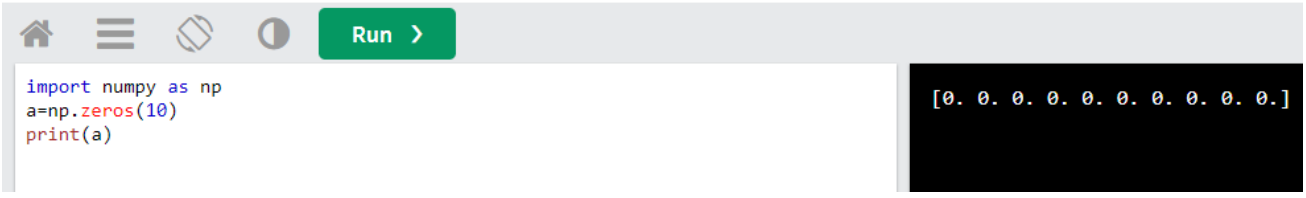
Question-4:

NUMPY

4.1- Create an array of 10 zeros?

Solution:

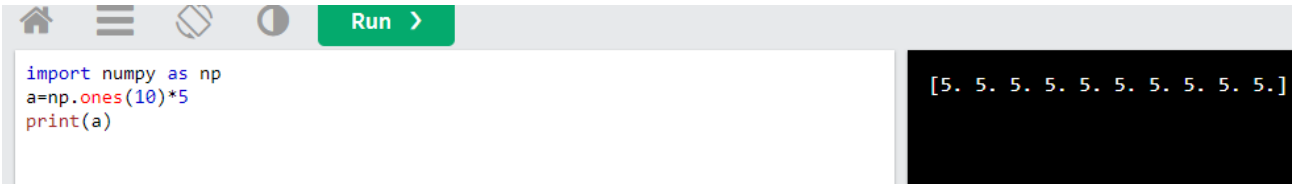
```
import numpy as np

a=np.zeros(10)

print(a)
```



4.2 Create an array of 10 fives?

Solution:

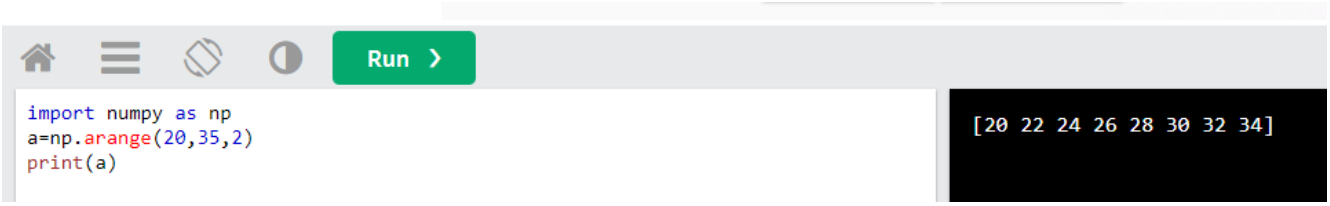
```
import numpy as np

a=np.ones(10)*5

print(a)
```



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

Solution:

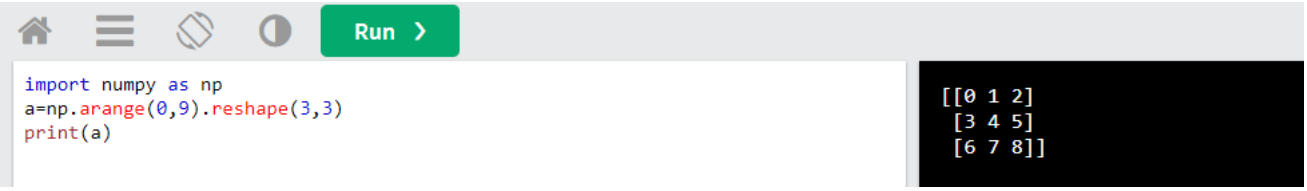
```
import numpy as np

a=np.arange(20,35,2)

print(a)
```



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

Solution:

```
import numpy as np
a=np.arange(0,9).reshape(3,3)
print(a)
```

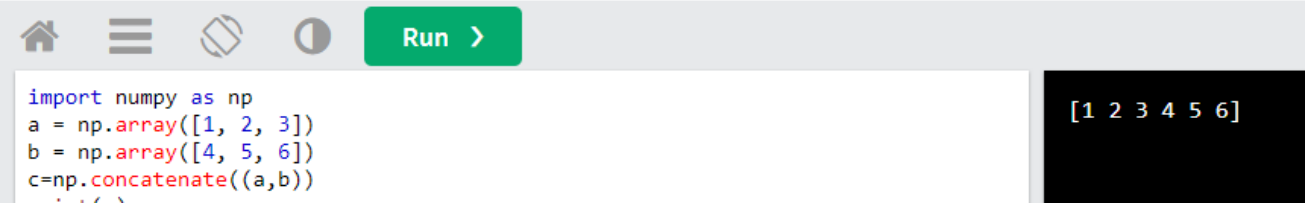


7. Concatenate a and b

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

Solution:

```
import numpy as np
a = np.array([1, 2, 3])
b = np.array([4, 5, 6])
c=np.concatenate((a,b))
print(c)
```

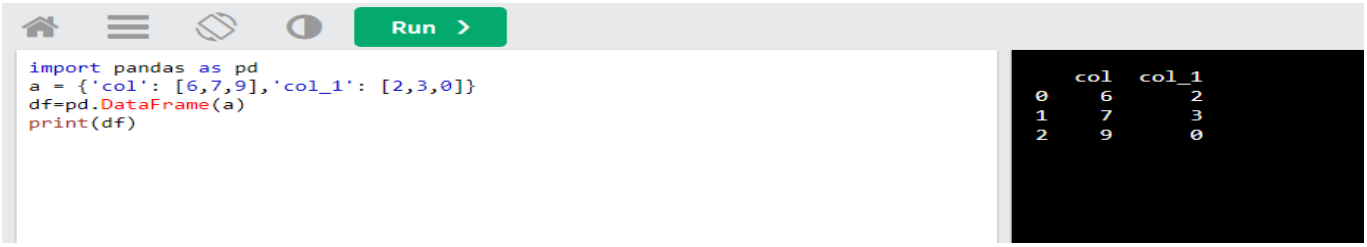


Pandas

8. Create a dataframe with 3 rows and 2 columns

Solution:

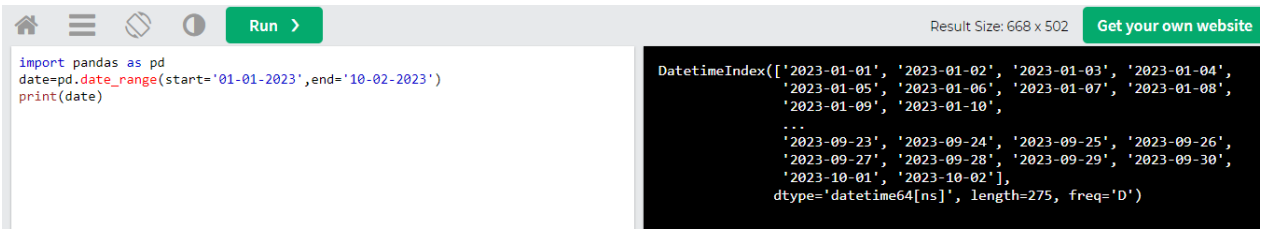
```
import pandas as pd
a = {'col': [6,7,9],'col_1': [2,3,0]}
df=pd.DataFrame(a)
print(df)
```



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

Solution:

```
import pandas as pd

date=pd.date_range(start='01-01-2023',end='10-02-2023')

print(date)
```



10. Create 2D list to DataFrame

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

Solution:

```
import pandas as pd
lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
df=pd.DataFrame(lists)
print(df)
```