Assignment -1
Python Programming

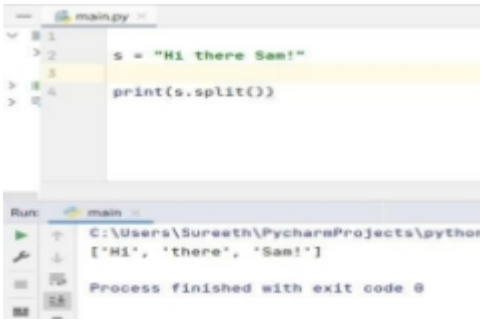
Assignment Date	19 September 2022
Student Name	Mr. Shanmugam P L
Student Roll Number	113219071039
Maximum Marks	2 Marks

Question-1:

1. Split this string

Solution:

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



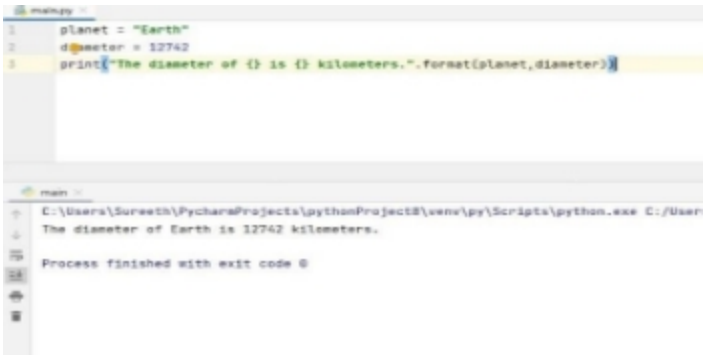
Question-2:

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))
```


main.py
planet = "Earth"
diameter = 12742
print("The diameter of {} is {} kilometers.".format(planet,diameter))
main
C:\Users\Suresth\PycharmProjects\pythonProject8\venv\py\Scripts\python.exe C:/User
The diameter of Earth is 12742 kilometers.
Process finished with exit code 0

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

Solution:

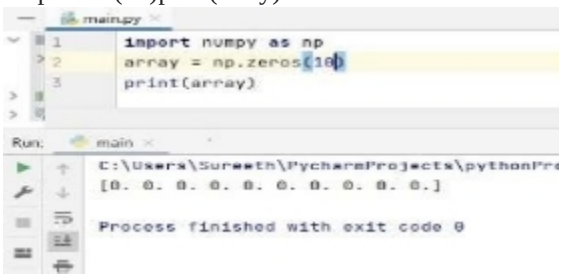
```
d={'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}
]}]}

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

4.1 4.1 Create an array of 10 zeros?

Solution:

import numpy **as** np array =
np.zeros(10)print(array)

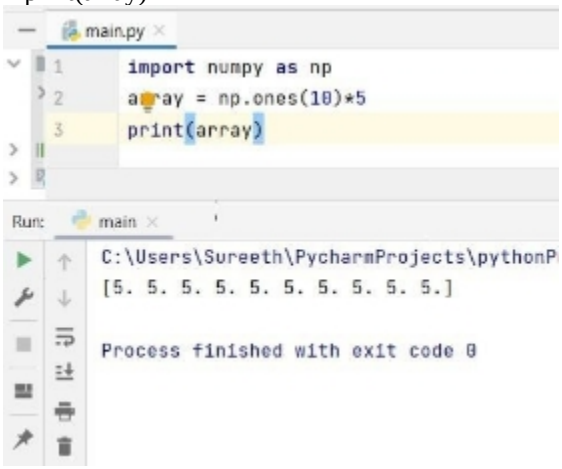


4.2 4.2 Create an array of 10 fives?

Solution:

Import numpy as np array =
np.ones(10)*5

print(array)

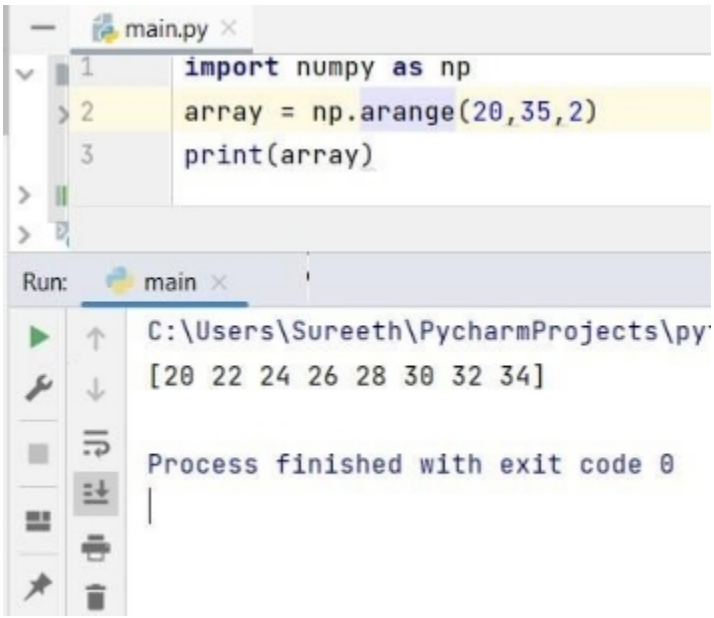


5. Create an array of all the even integers from 20 to 35

Solution:

Import numpy as np

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

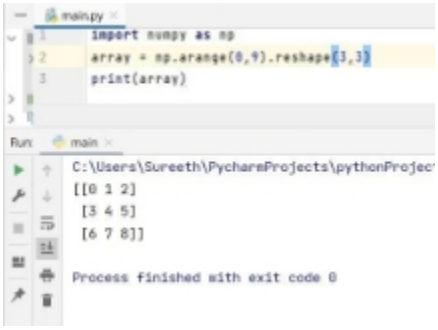


6. Create a 3x3 matrix with values ranging from 0 to 8

Solution:

import numpy as np

array = np.arange(0,9).reshape(3,3)print(array)

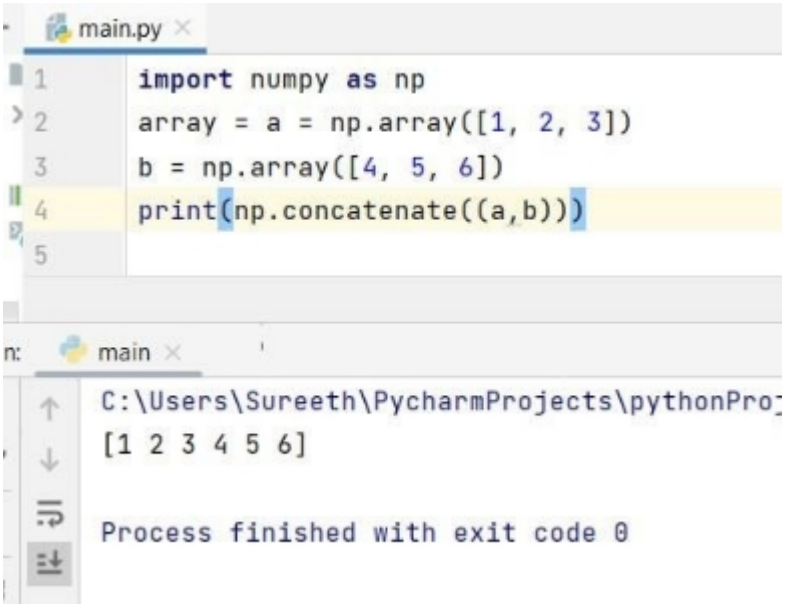


7. Concatinate a and b

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

Solution:

import numpy as np



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

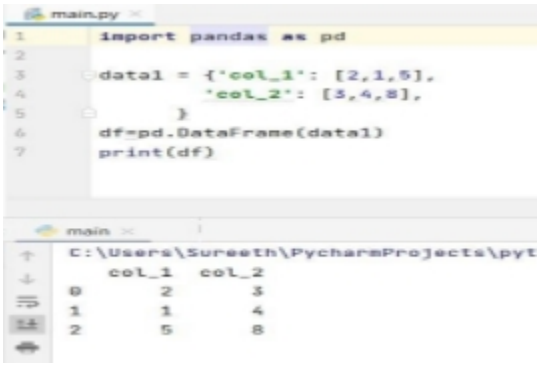
```
np.array([4,5,6])
print(np.concatenate((a,b)))
```

8. Create a dataframe with 3 rows and 2 columns

Solution:

import pandas as pd

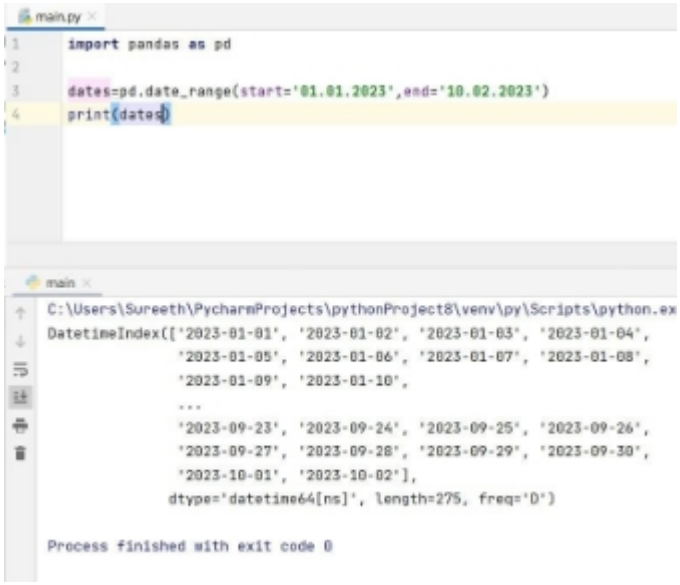
data = {'col_1': [2,1,5],
'col_2': [3,4,8],
}
df=pd.DataFrame(data)print(df)



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)

main.py

```
1  import pandas as pd
2  lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
3  df1=pd.DataFrame(lists)
4  print(df1)
```

main

```
C:\Users\Sureeth\PycharmProjects\pythonProject8\venv\py\Scripts\pyth
   0    1   2
0  1  aaa  22
1  2  bbb  25
2  3  ccc  24

Process finished with exit code 0
```