**Assignment -1**

Python Programming

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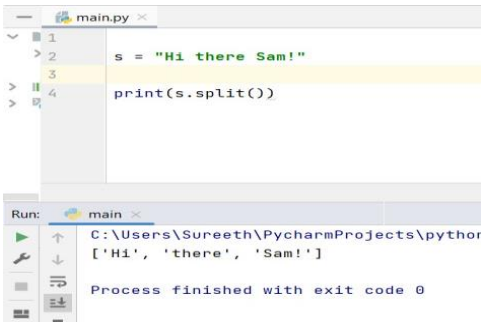
|---|---|
| Assignment Date | 19 September 2022 |
| Student Name | Mr. T.L.Sureeth |
| Student Roll Number | 113219071044 |
| Maximum Marks | 2 Marks |

**Question-1:**

# 1. Split this string

**Solution:**

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



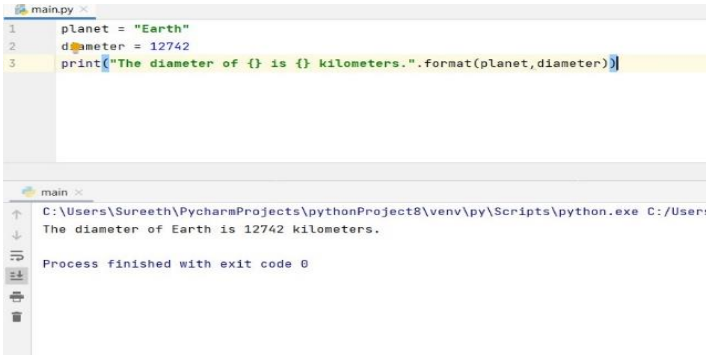

**Question-2:**

# 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))
```



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

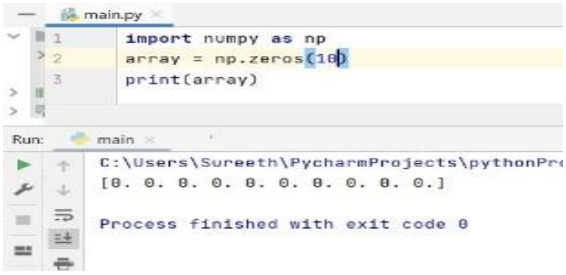
**Solution:**

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

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


# 4.1 Create an array of 10 zeros?

**Solution:**

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

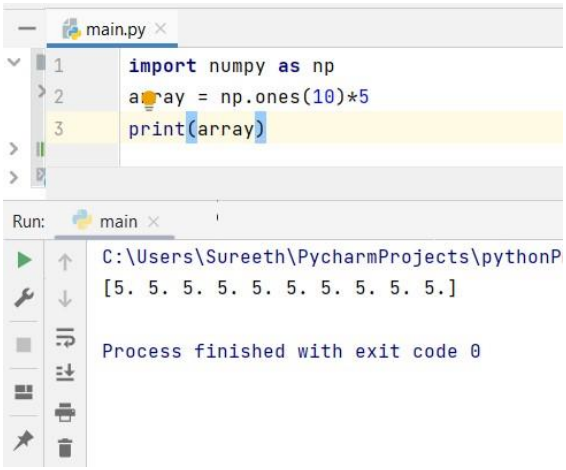



# 4.2 Create an array of 10 fives?

**Solution:**

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

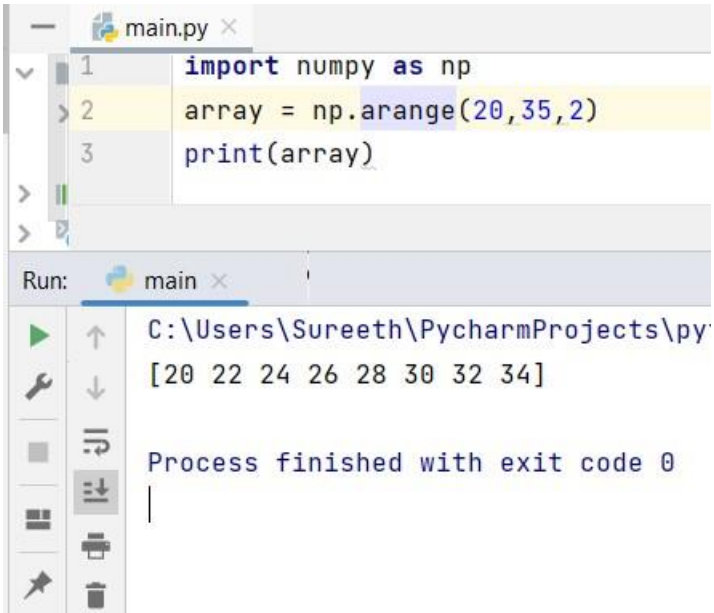
```
print(array)
```




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

**Solution:**

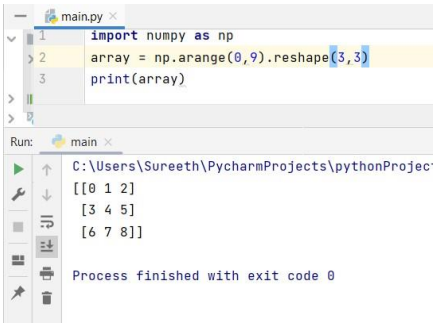
```
Import numpy as np
array = np.arange(20,35,2)
print(array)
```



# 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)
```

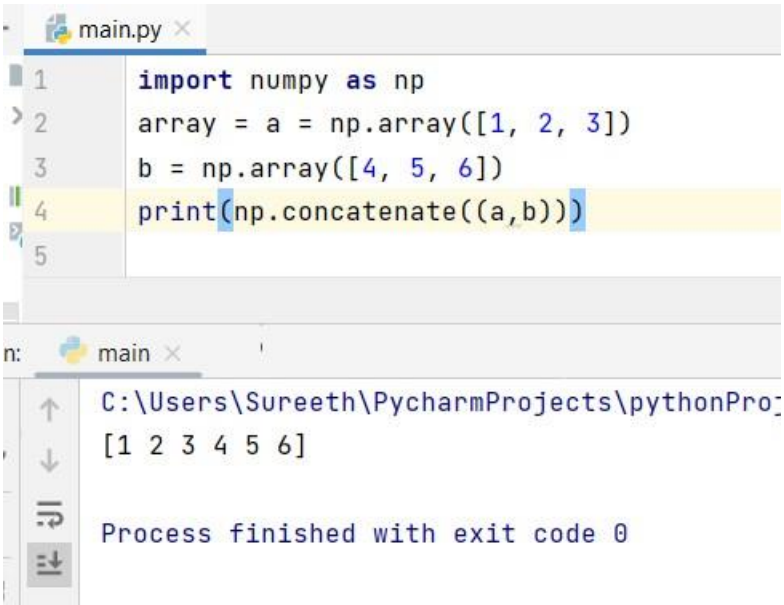



# 7. Concatinate a and b

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

**Solution:**

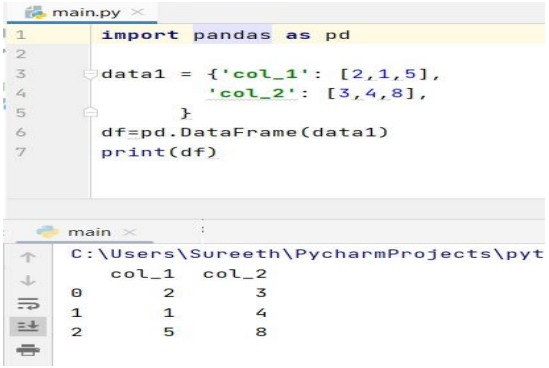
```
import numpy as np
array = a = np.array([1,2,3])
b = np.array([4,5,6])
print(np.concatenate((a,b)))
```



# 8. Create a dataframe with 3 rows and 2 columns

**Solution:**

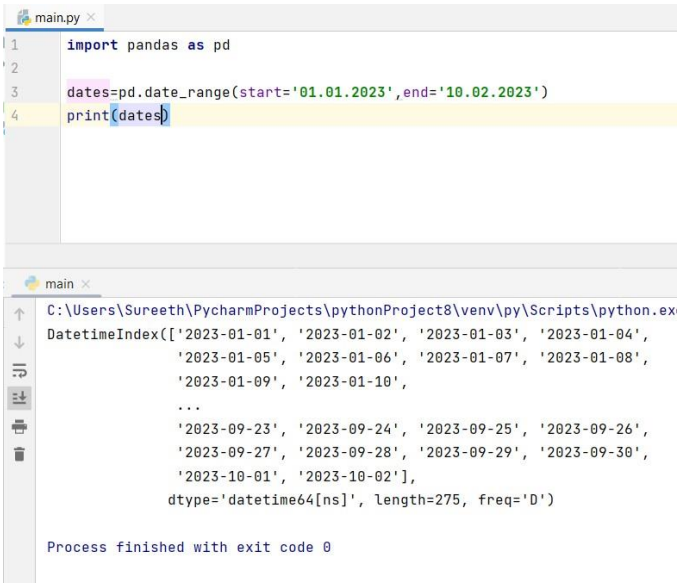
```
import pandas as pd

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
```