Assignment -1

Python

Programming

Assignment Date	19 September 2022
Student Name	Ms.Shanmathi B
Student Roll Number	922519205100
Maximum Marks	2 Marks

Question-1:

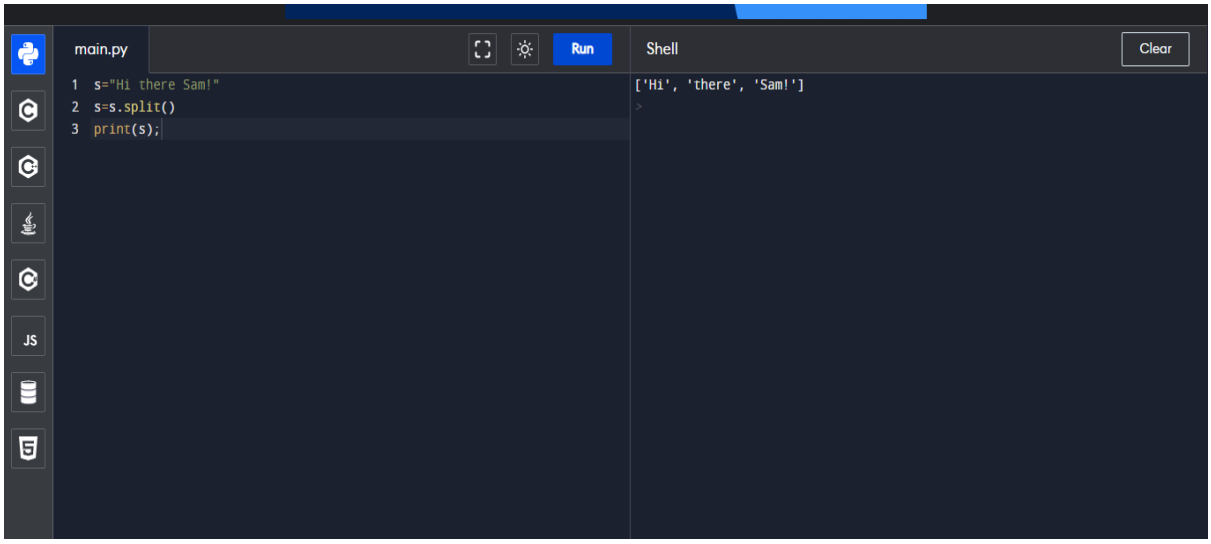
Split this string

Solution:

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

#.....#

#.....#

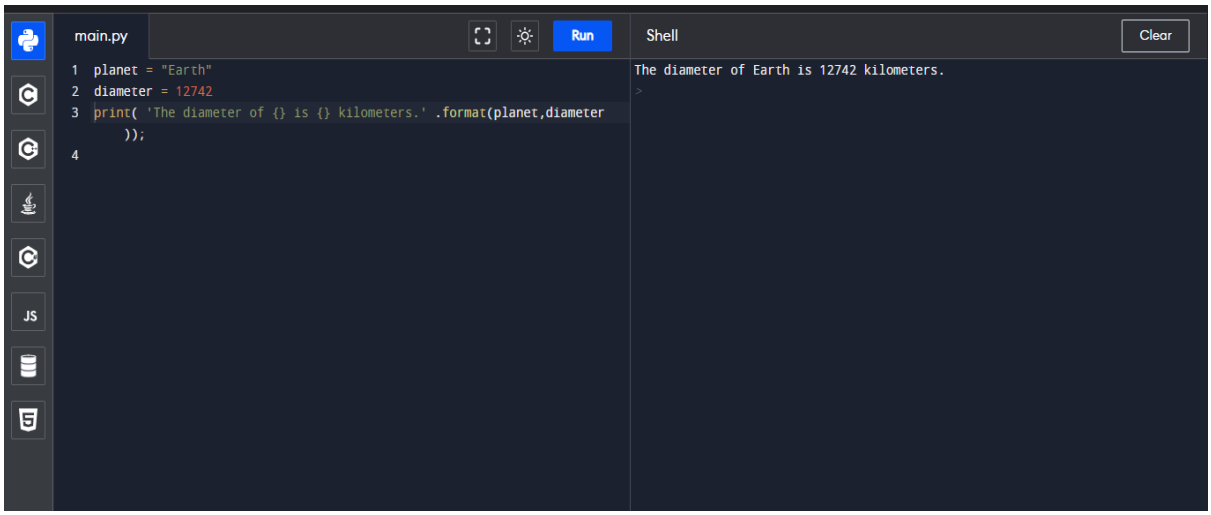


Question-2:

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));
```



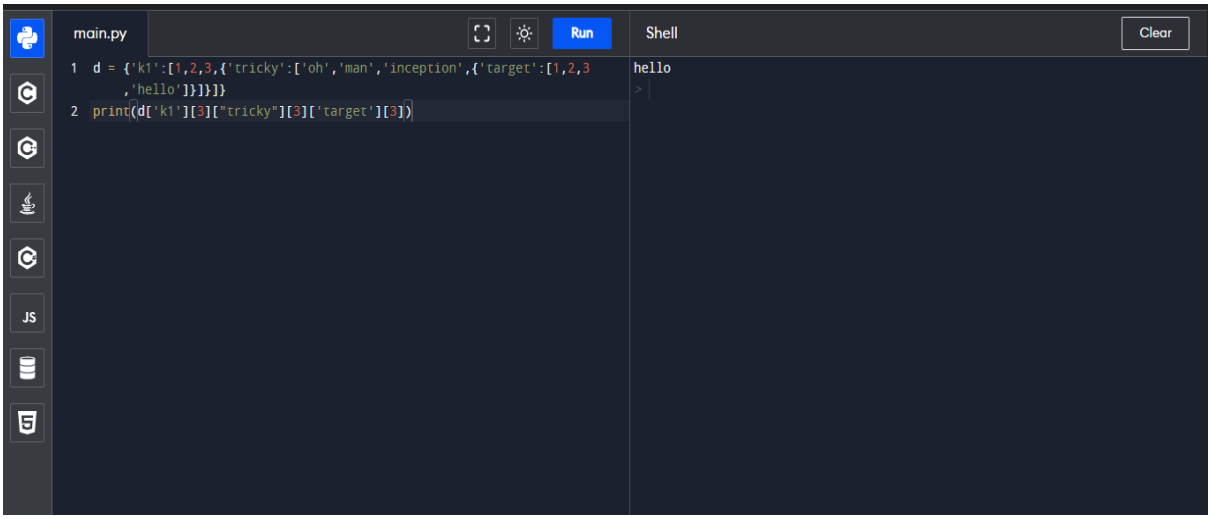
Question-3:

In this nest dictionary grab the word "hello"

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

Solution:

```
d =
{'k1':[1,2,3,{'tricky':['oh','man','inception',{'ta
rget':[1,2,3,'hello']}]}]}
print(d['k1'][3]["tricky"][3]['target'][3])
```



Question-4:

Numpy

```
import numpy as np
```

4.1 Create an array of 10 zeros?

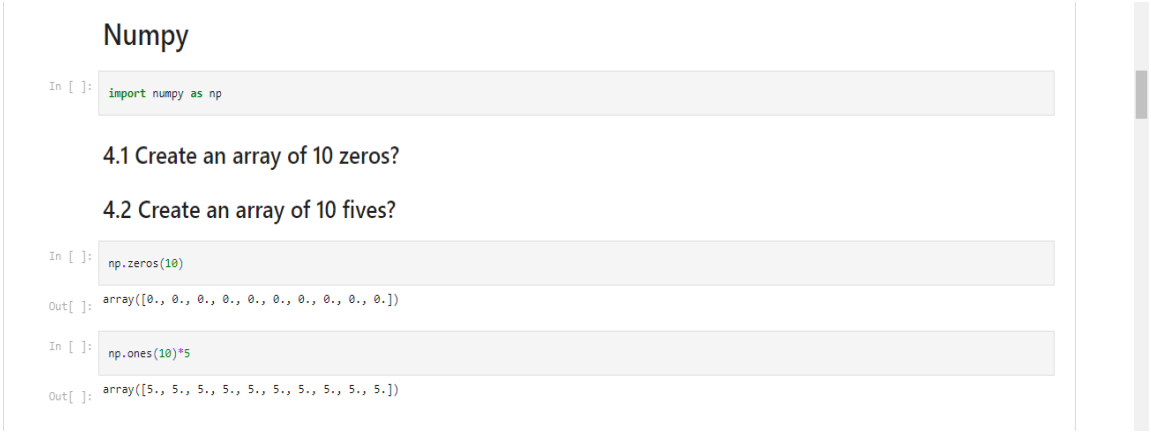
Solution:

```
np.zeros(10)
```

4.2 Create an array of 10 fives?

Solution:

np.ones(10)*5

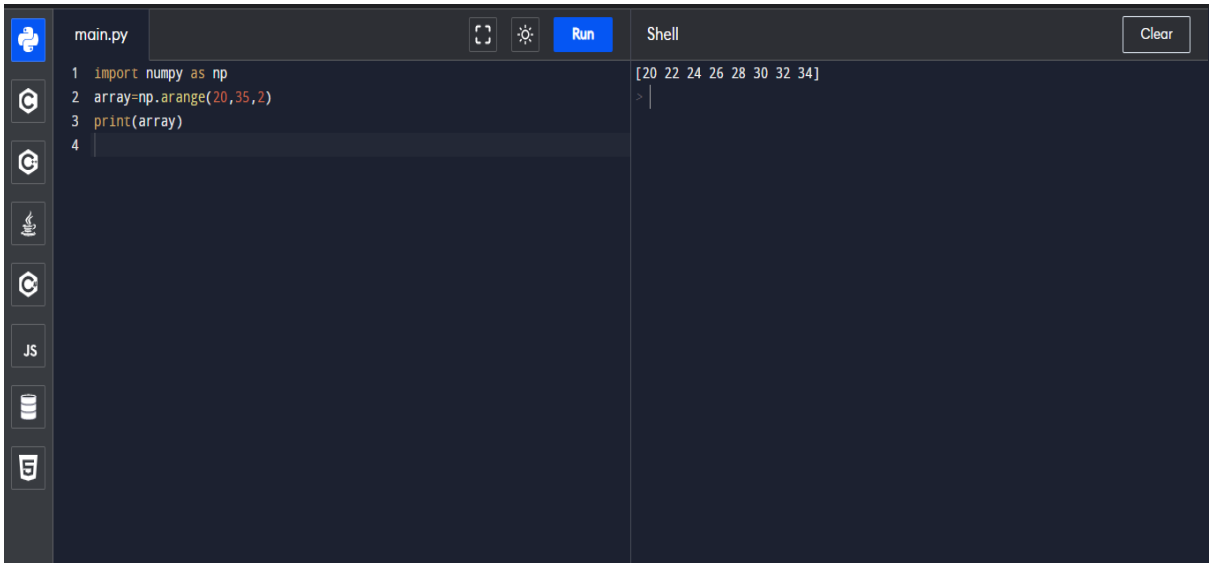


Question-5:

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)
```

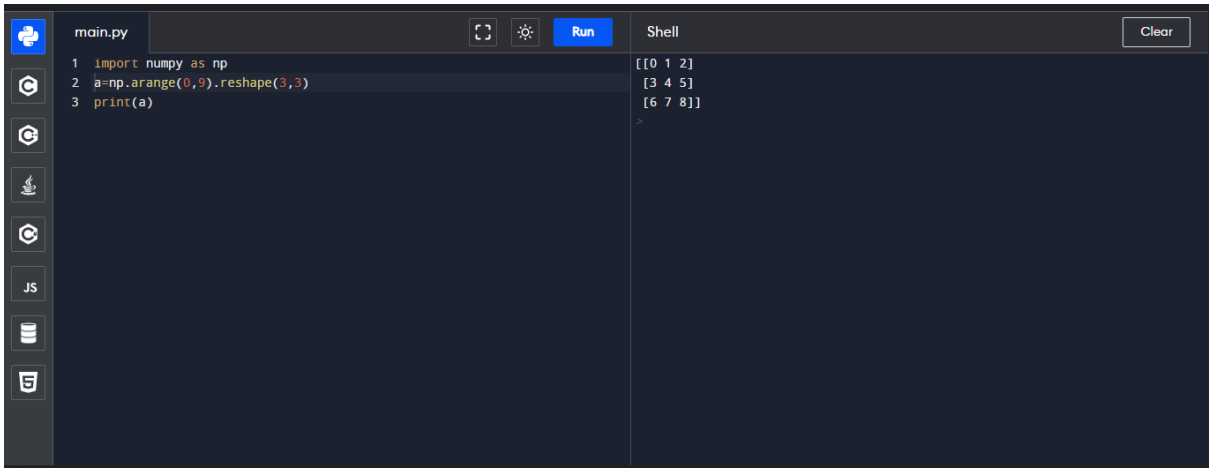


Question-6:

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

Solution:

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



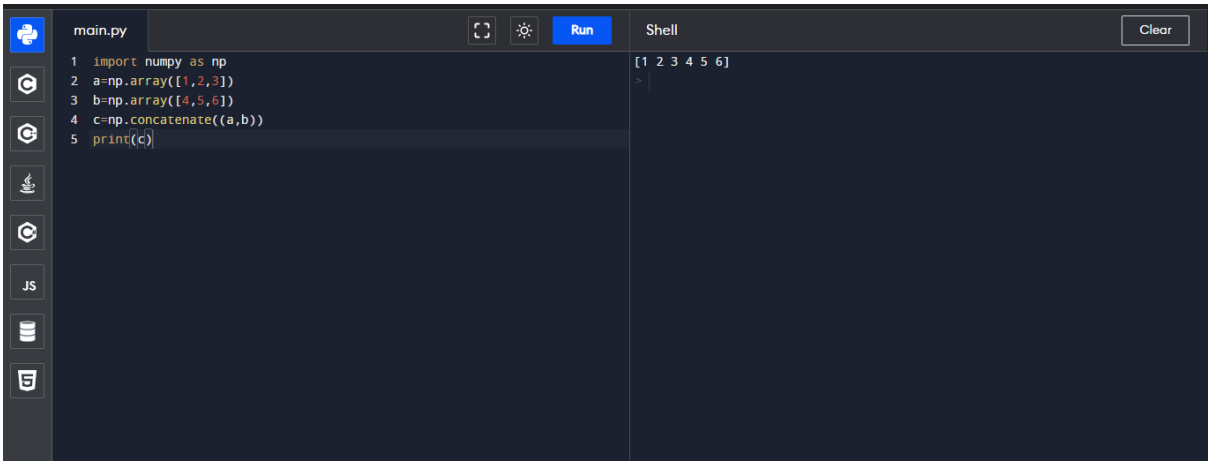
Question-7:

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)
```



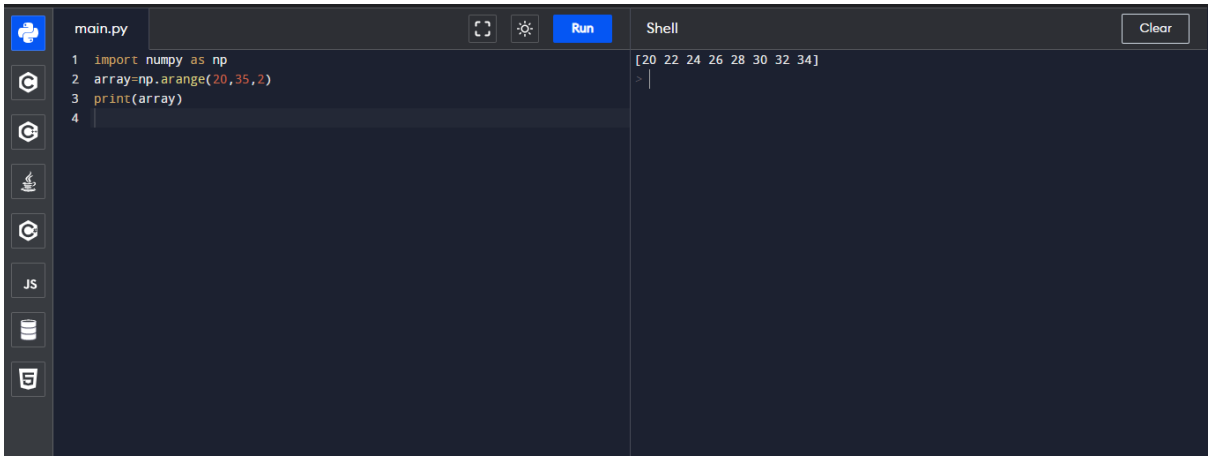
Pandas

Question-8:

Create a dataframe with 3 rows and 2 columns

Solution:

```
import pandas as pd
array=np.arange(20,35,2)
print(array)
```

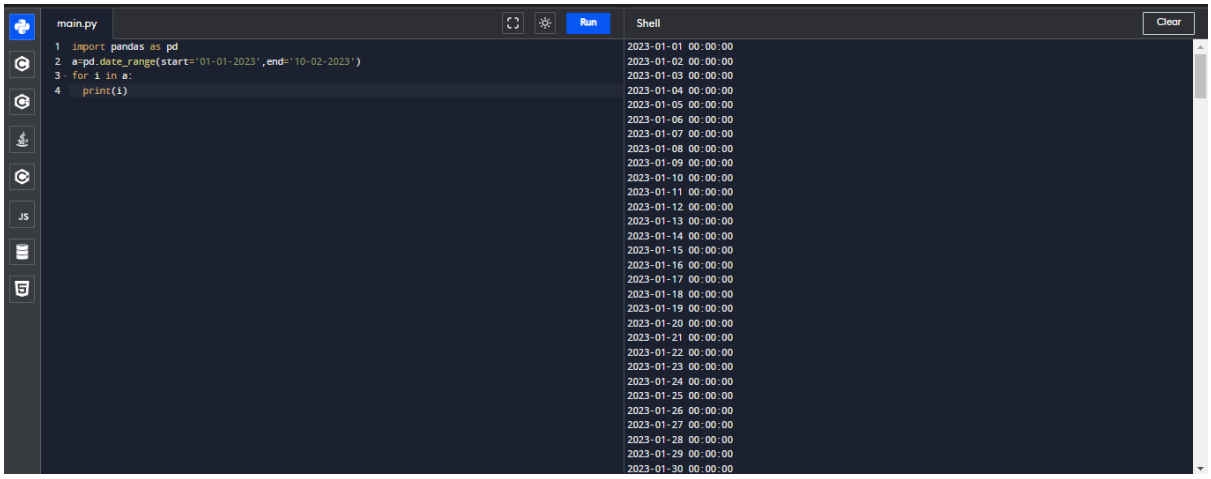


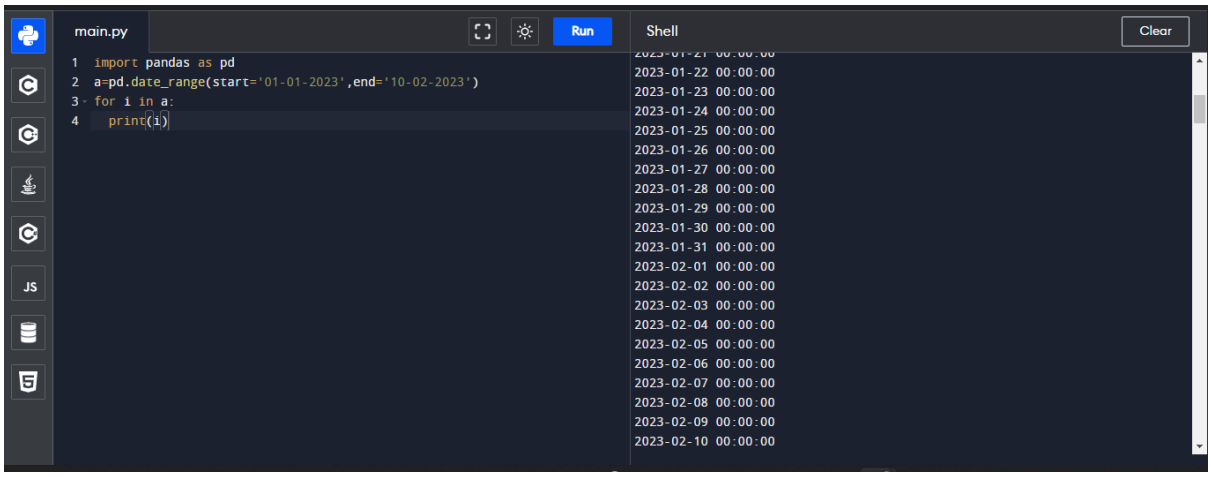
Question-9:

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

Solution:

```
import pandas as pd
a=pd.date_range(start='01-01-2023',end='10-02-2023')
for i in a:
print(i)
```





Question-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,columns=['Tag','ABC','number'])
print(df)