Assignment -1

Python Programming

Assignment Date	18 OCTOBER 2022
Student Name	SRIDHARAN S
Student Roll Number	19IT053
Maximum Marks	2 Marks

Question-1:

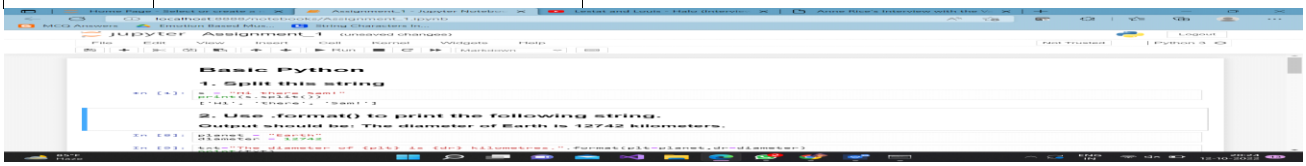
Split this string

Solution:

```
s = "Hi there Sam!"

print(s.split())

#-------------------------------------#
#-------------------------------------#
```



Question-2:

Use .format() to print the following string.
Output should be: The diameter of Earth is 12742 kilometers**.**

Solution:

```
planet = "Earth"

diameter = 12742

txt="The diameter of {plt} is {dr}
kilometres.".format(plt=planet,dr=diameter)

print(txt)
```

	#----------# #----------#

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']}]}]}

Question 4.1:

Create an array of 10 zeros?

Solution:

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

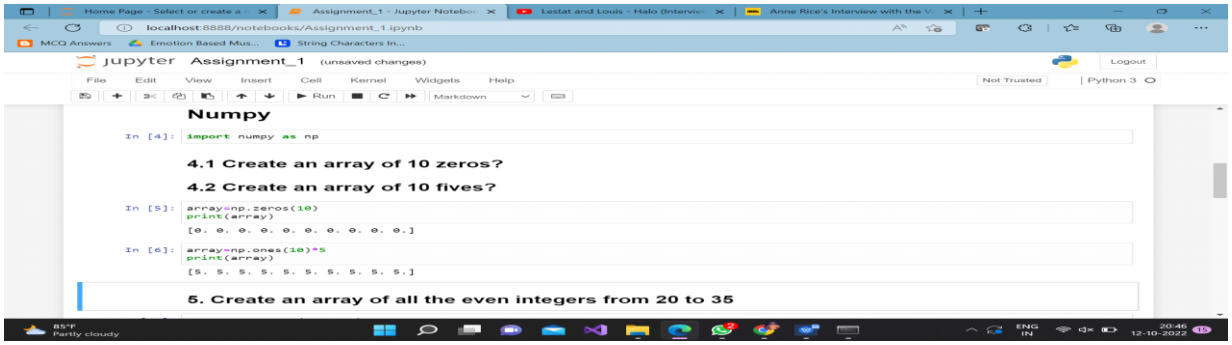
Question4.2:

Create an array of 10 fives?

Solution:

```
import numpy as np
```

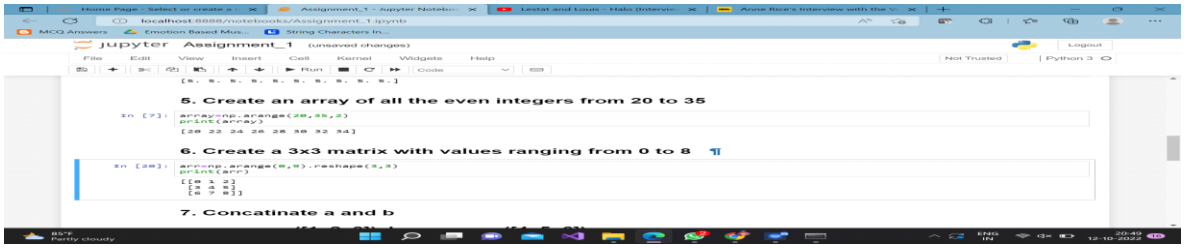
```
array=np.ones(10)*5print(array)
```



Question 5:

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

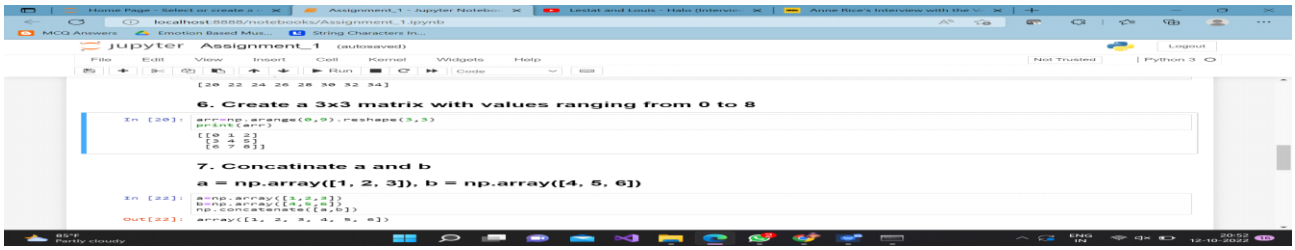
```
array=np.arange(20,35,2)
print(array)
```



Question 6:

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

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

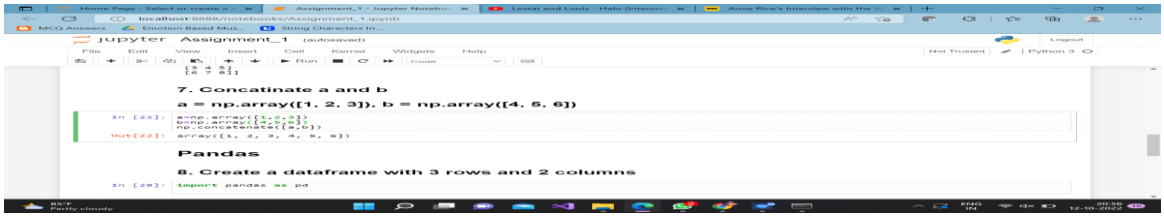


Question 7:

Concatinate a and b

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

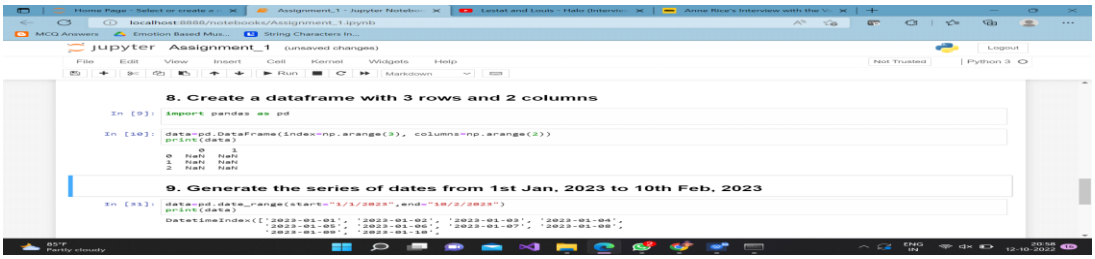
```
a=np.array([1,2,3])
b=np.array([4,5,6])
np.concatenate([a,b])
```



Question 8:

Create a dataframe with 3 rows and 2 columns
Solution:

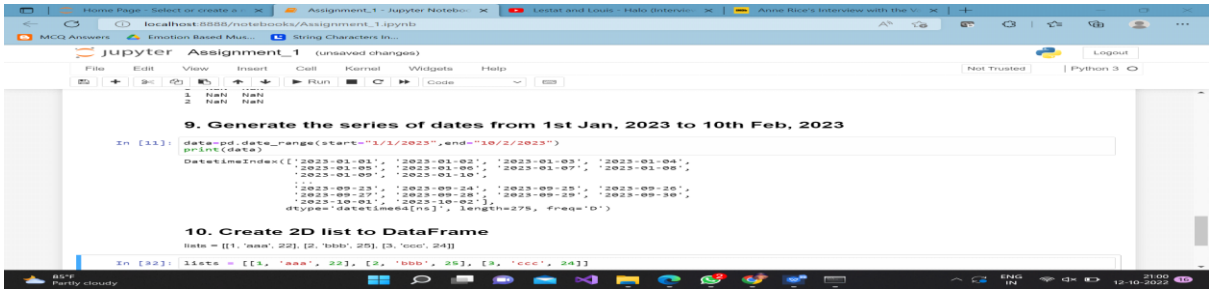
```
import pandas as pd
data=pd.DataFrame(index=np.arange(3), columns=np.arange(2))
print(data)
```



Question 9:

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

```
data=pd.date_range(start="1/1/2023",end="10/2/2023")
print(data)
```



Question 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]]
data=pd.DataFrame(lists,columns=["s.no","pattern","number"])print(data)
```