

Assignment Date	09 september 2022
Student Name	M.Bharat
Student Roll Number	962719106006
Maximum Mark	2 marks

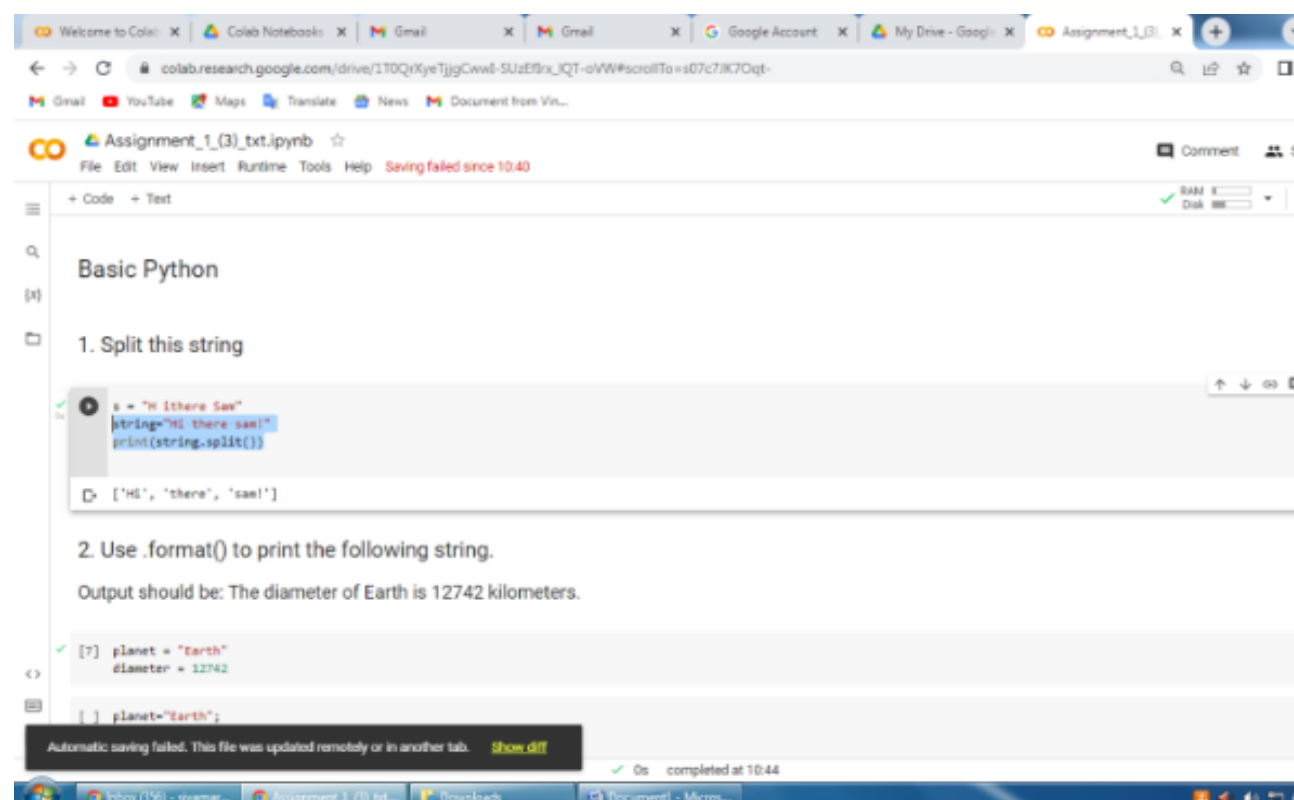
1. Split this string

`s = "H i t h e r e S a m"`

solution:

`string="Hi there sam!"`

`print(string.split())`



2. Use .format() to print the following string.

Output should be: The diameter of Earth is 12742 kilometers.

`planet = "Earth"`

`diameter = 12742`

solution:

`planet="Earth";`

`diameter=12742;`

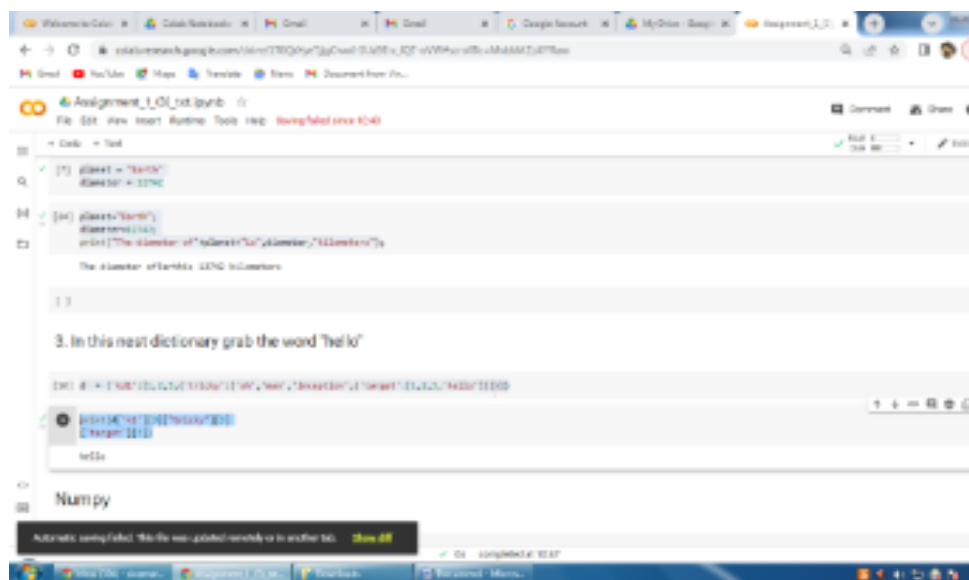
`print("The diameter of"+planet+"is",diameter,"kilometers")`



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

```
d = {'kd1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}
solution:
```

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



4.1 Create an array of 10 zeros?

Solution:

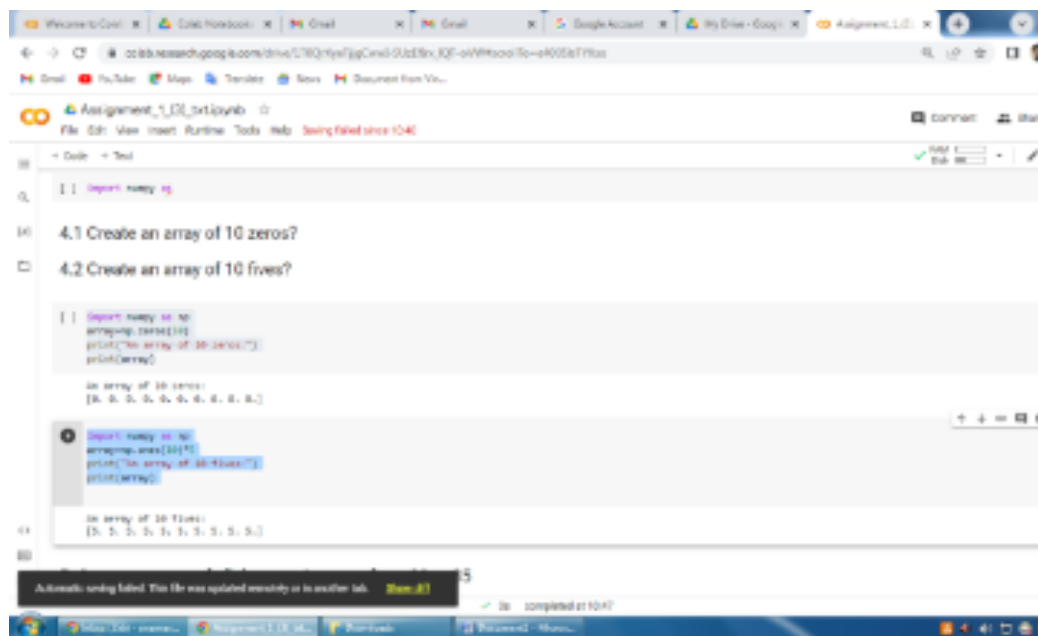
```
import numpy as np
array=np.zeros(10)
print("An array of 10 zeros:")
print(array)
```



4.2 Create an array of 10 fives?

Solution:

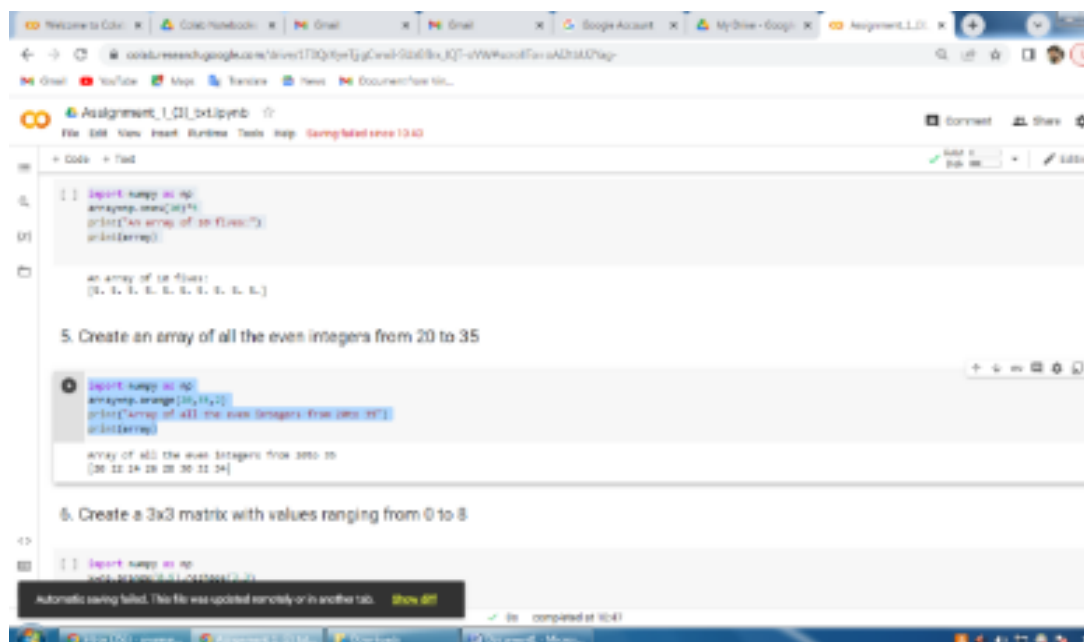
```
import numpy as np
array=np.ones(10)*5
print("An array of 10 fives:")
print(array)
```



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

Solution:

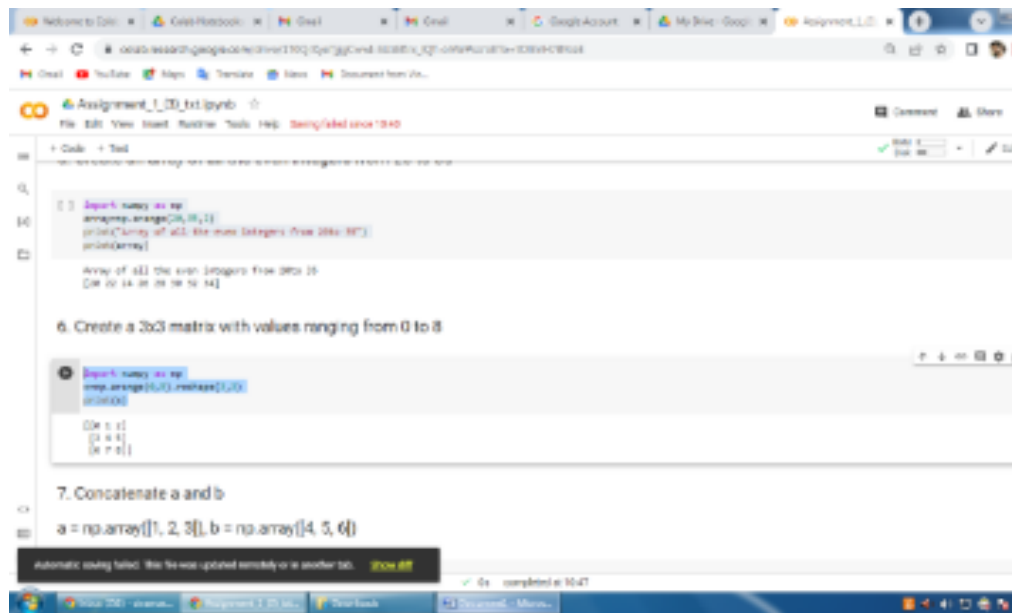
```
import numpy as np
array=np.arange(20,35,2)
print("Array of all the even integers from 20to 35")
print(array)
```



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

Solution:

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



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])
arr=np.stack((a,b),axis=0)
print(arr)

```



8. Create a dataframe with 3 rows and 2 columns

Solution:

```

import pandas as pd
data=[['tom',10],['nick',15],['juli',14]]
df=pd.DataFrame(data,columns=['Name','Age'])
df

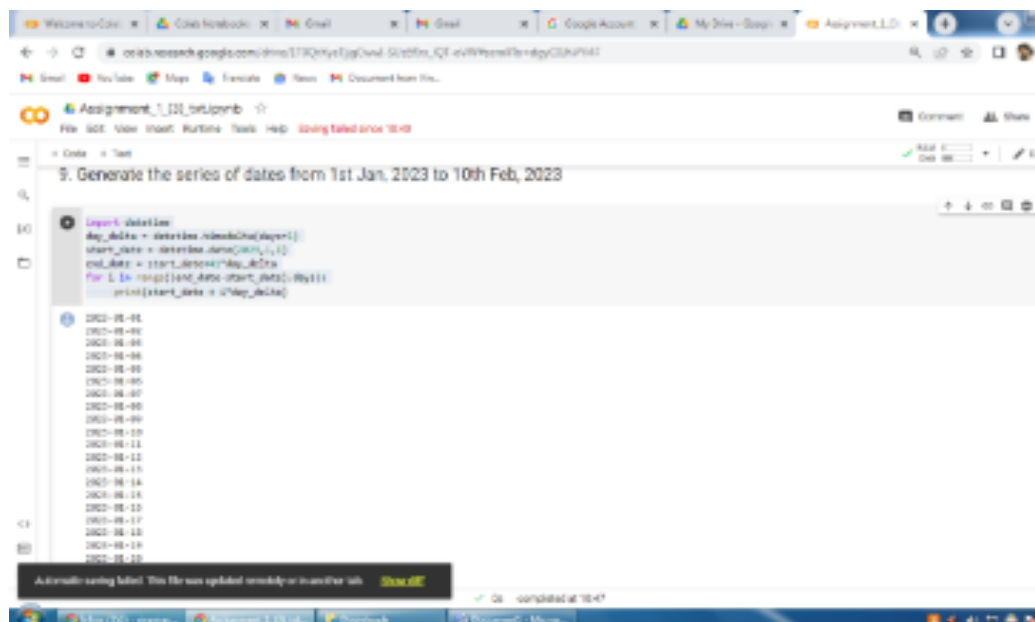
```



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

Solution:

```
import datetime
day_delta = datetime.timedelta(days=1)
start_date = datetime.date(2023, 1, 1)
end_date = start_date + 41 * day_delta
for i in range((end_date - start_date).days):
    print(start_date + i * day_delta)
```



10. Create 2D list to DataFrame

Solution:

```
df = pd.DataFrame(lists, columns=['Number', 'Letter', 'Number'])
print(df)
```

The screenshot shows a Jupyter Notebook with the following content:

```

10 10, Create 2D list to DataFrame
11 iris = [[ 'set', 5.1, 3.6, 1.4, 0.1, 0]
12         [ 'set', 4.9, 3.0, 1.4, 0.1, 0]
13         [ 'set', 4.7, 3.2, 1.3, 0.2, 0]
14         [ 'set', 4.6, 3.1, 1.5, 0.2, 0]
15         [ 'set', 5.0, 3.6, 1.4, 0.1, 0]
16         [ 'set', 5.4, 4.4, 1.5, 0.4, 0]
17         [ 'set', 5.2, 3.7, 1.4, 0.3, 0]
18         [ 'set', 5.2, 3.4, 1.4, 0.4, 0]
19         [ 'set', 4.8, 3.0, 1.4, 0.3, 0]
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25         [ 'set', 5.0, 3.5, 1.6, 0.4, 0]
26         [ 'set', 5.1, 3.8, 1.6, 0.2, 0]
27         [ 'set', 4.6, 3.0, 1.4, 0.4, 0]
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```