

Assignment submission	10 October 2022
Student Name	Lakshmidevi.S
Student Roll Number	951920LCS03
Maximum Marks	2 Marks

The screenshot shows a Google Colab notebook with the following content:

```

1. Split this string

[2] s = "Hi there sujil"
[3] print(s.split())
    ['Hi', 'there', 'sujil']

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

[10] planet = "Earth"
      diameter = 12742
[11] print("The diameter of {} is {} kilometers.".format(planet,diameter))
    The diameter of Earth is 12742 kilometers.

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

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

The notebook interface includes a top bar with tabs for 'Assignment_1.ipynb' and 'IBM-EPBL/IBM-Project-23793-1'. The bottom status bar shows '0s completed at 13:54' and system icons for temperature, time, and date.

The screenshot shows a Google Colab notebook with the following content:

```

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

[12] d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}
[14] print(d['k1'][3]['tricky'][3]['target'][3])
    hello

Numpy

[ ] import numpy as np

4.1 Create an array of 10 zeros?
4.2 Create an array of 10 fives?

[15] a=np.zeros(10)
      print(a)
    [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]

a=np.ones(10)*5
print(a)
    [5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
  
```

The notebook interface is consistent with the previous screenshot, showing the same top bar and bottom status bar.

IBM 1 - ravisujitha02@gmail.com x Assignment_1.ipynb - Colaborat... Assignment_1.ipynb - Colaborat... IBM-EPBL/IBM-Project-23793-11 x +

colab.research.google.com/drive/1FcMKxMxGrAeCSZp_5RQUaytr5R9VkbQ#scrollTo=xNpl_XXoYhs0

+ Code + Text

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

```
[17] a=np.arange(20,35,2)
      print(a)

[20 22 24 26 28 30 32 34]
```

Double-click (or enter) to edit

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

```
[18] m=np.arange(0,9).reshape(3,3)
      print(m)

[[0 1 2]
 [3 4 5]
 [6 7 8]]
```

7. Concatenate a and b

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

[19] a = np.array([1, 2, 3])
      b = np.array([4, 5, 6])
      print(np.concatenate((a,b),axis=0))

[1 2 3 4 5 6]
```

0s completed at 13:54

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+ Code + Text

8. Create a dataframe with 3 rows and 2 columns

```
[8] import pandas as pd
     import matplotlib.pyplot as plt
     import numpy as np

data=[["Arunshanmugam","Mentor"],["sujitha","leader"],["lakshmi devi","Member"]]
print(pd.DataFrame(data,columns=["Name","Role"]))
```

	Name	Role
0	Arunshanmugam	Mentor
1	sujitha	leader
2	lakshmi devi	Member

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

```
[6] from datetime import datetime

date=pd.date_range(start="2023-01-01",end="2023-02-10")
print(pd.Series(date))
```

```
0    2023-01-01
1    2023-01-02
2    2023-01-03
3    2023-01-04
4    2023-01-05
5    2023-01-06
6    2023-01-07
7    2023-01-08
8    2023-01-09
```

0s completed at 13:54

33°C Partly sunny

IBM 1 - ravisujitha02@gmail.com | Assignment_1.py - Colaboratory | Assignment_1.py - Colaboratory | IBM-EPBL/IBM-Project-23793-10 | +

colab.research.google.com/drive/1FcMKxMxGrAeCSZp_5RQUaytr5R9VkbQ#scrollTo=xNpl_XXoYhs0

+ Code + Text

21 2023-01-22
22 2023-01-23
23 2023-01-24
24 2023-01-25
25 2023-01-26
26 2023-01-27
27 2023-01-28
28 2023-01-29
29 2023-01-30
30 2023-01-31
31 2023-02-01
32 2023-02-02
33 2023-02-03
34 2023-02-04
35 2023-02-05
36 2023-02-06
37 2023-02-07
38 2023-02-08
39 2023-02-09
40 2023-02-10
dtype: datetime64[ns]

10. Create 2D list to DataFrame

lists = [[1, 'aad', 22], [2, 'bbb', 25], [3, 'ccc', 24]]

lists = [[1, 'xxx', 22], [2, 'yyy', 25], [3, 'zzz', 24]]
pd.DataFrame(lists, columns=["S.No.", "Name", "Quantity"])

	S.No.	Name	Quantity
0	1	xxx	22
1	2	yyy	25
2	3	zzz	24

0s completed at 13:54

33°C Partly sunny

14:09 18-09-2022