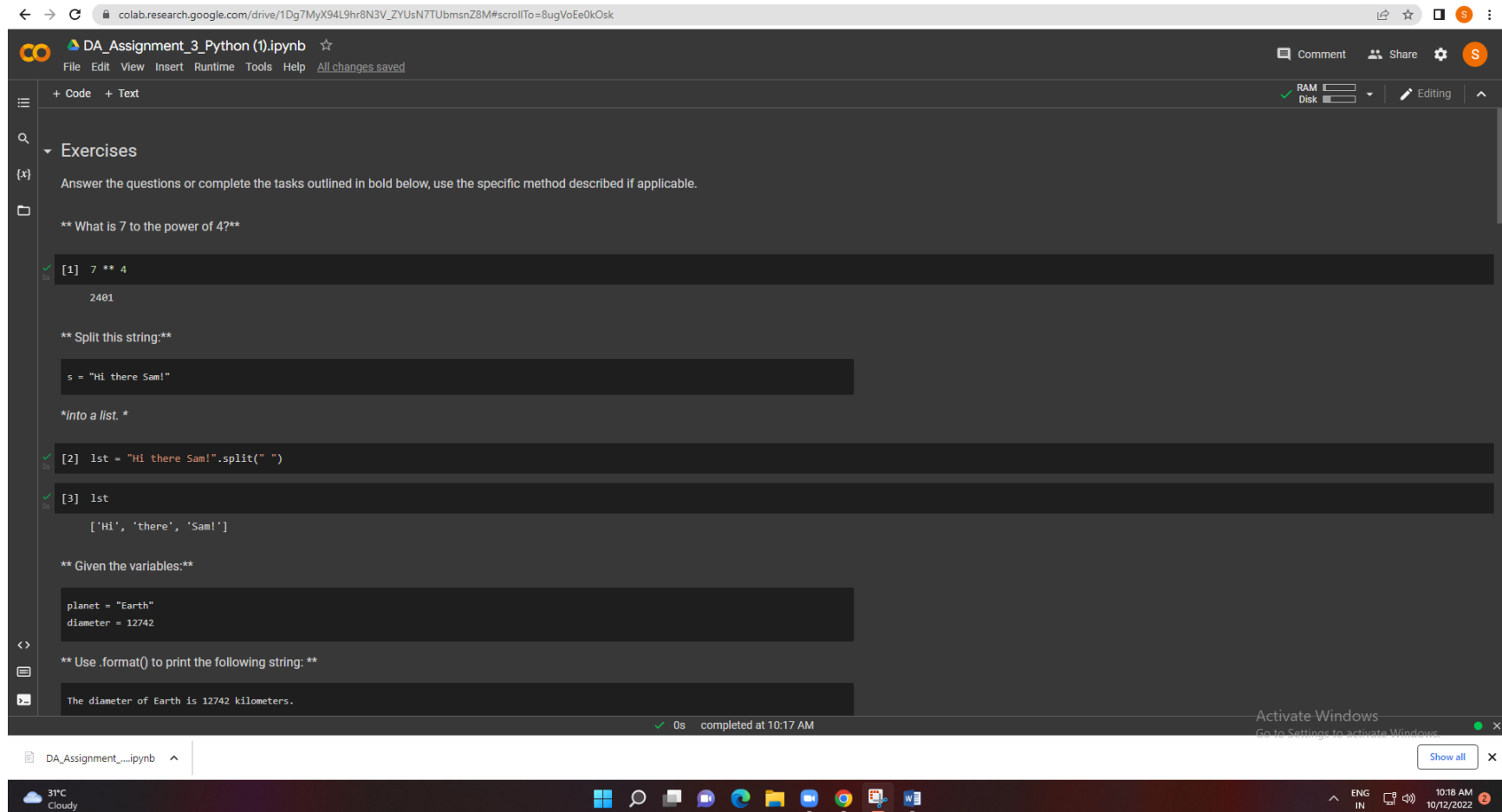


IBM ASSIGNMENT 3



The screenshot shows a Google Colab notebook interface. The browser address bar at the top displays the URL: `colab.research.google.com/drive/1Dg7MyX94L9hr8N3V_ZYUsN7TUbsnZ8M#scrollTo=8ugVoEe0kOsk`. The notebook title is `DA_Assignment_3_Python (1).ipynb`. The menu bar includes `File`, `Edit`, `View`, `Insert`, `Runtime`, `Tools`, and `Help`, with a status indicator `All changes saved`. On the right, there are buttons for `Comment`, `Share`, and a settings icon, along with a RAM/Disk usage monitor and an `Editing` mode toggle.

The notebook content is organized into a section titled `Exercises`. Below this title, a general instruction reads: `Answer the questions or complete the tasks outlined in bold below, use the specific method described if applicable.`

The first exercise asks: `** What is 7 to the power of 4? **`. The solution is shown in a code cell: `[1] 7 ** 4`, which outputs `2401`.

The second exercise asks: `** Split this string: **` with the variable `s = "Hi there Sam!"` and the instruction `*into a list.*`. The solution is shown in two code cells: `[2] lst = "Hi there Sam!".split(" ")` and `[3] lst`, which outputs `['Hi', 'there', 'Sam!']`.

The third exercise asks: `** Given the variables: **` with `planet = "Earth"` and `diameter = 12742`, and the instruction `** Use .format() to print the following string: **`. The solution is shown in a code cell: `The diameter of Earth is 12742 kilometers.`

At the bottom of the notebook, a status bar indicates `0s completed at 10:17 AM`. An `Activate Windows` watermark is visible in the bottom right corner of the notebook area.

The Windows taskbar at the very bottom shows the system clock as `10:16 AM 10/12/2022`, the language as `ENG IN`, and various system icons.

The diameter of Earth is 12742 kilometers.

```
[5] s = "The diameter of {0} is {1} Kilometers".format(planet,diameter)
s
```

**** Given this nested list, use indexing to grab the word "hello" ****

```
[7] 1st[3][1][2][0]
```

**** Given this nest dictionary grab the word "hello". Be prepared, this will be annoying/tricky ****

```
[9] d['k1'][3]['tricky'][3]['target'][3]
```

**** What is the main difference between a tuple and a list? ****

✓ 0s completed at 10:17 AM

Show all X

user@domain.com

```
[11] def extract(str):  
      return str.split("@").pop()
```

```
'domain.com'
```

```
[13] def check(string):
      if string.find('dog') == -1:
          return False
      else:
          return True
```

```
dog is humans best friend
True
```

Activate Windows
Go to Settings to activate Windows.

← → ↺

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DA_Assignment_3_Python (1).ipynb ☆

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Comment Share ⚙️ 🔴

✓ RAM Disk

✎ Editing

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True

** Create a function that counts the number of times the word "dog" occurs in a string. Again ignore edge cases. **

✓ [15] def count(string):
return len([i for i in range(len(string)) if string.startswith('dog', i)])

✓ [16] count(input())

dog dog dog
3

▼ Problem

**You are driving a little too fast, and a police officer stops you. Write a function to return one of 3 possible results: "No ticket", "Small ticket", or "Big Ticket". If your speed is 60 or less, the result is "No Ticket". If speed is between 61 and 80 inclusive, the result is "Small Ticket". If speed is 81 or more, the result is "Big Ticket". Unless it is your birthday (encoded as a boolean value in the parameters of the function) – on your birthday, your speed can be 5 higher in all cases. **

✓ [17] def caught_speeding(speed, is_birthday):

if is_birthday:
speeding = speed - 5
else:
speeding = speed

if speeding > 80:
return 'Big Ticket'
elif speeding > 60:
return 'Small Ticket'
else:
return 'No Ticket'

✓ [18] caught_speeding(85,False)

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Go to Settings to activate Windows.

Show all ✕

DA_Assignment_...ipynb

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DA_Assignment_3_Python (1).ipynb

File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

RAM Disk

Editing

[19] caught_speeding(66,True)

'Small Ticket'

Create an employee list with basic salary values(at least 5 values for 5 employees) and using a for loop retrieve each employee salary and calculate total salary expenditure.

[22] Employee=[11000,12500,13000,15700,15000]
total=0
for i in Employee:
total +=i
print(total)

67200

Create two dictionaries in Python:
First one to contain fields as Empid, Empname, Basicpay
Second dictionary to contain fields as DeptName, DeptId.
Combine both dictionaries.

d1,d2 = {},{}
d1 = {'Empid':1000,'Empname':'Struthi','Basicpay':25000}
d2 = {'DeptName':'Engine assembly','DeptId':'DI1000'}
d1.update(d2)
d1

{'Empid': 1000,
'Empname': 'Struthi',
'Basicpay': 25000,
'DeptName': 'Engine assembly',
'DeptId': 'DI1000'}

0s completed at 10:17 AM

Activate Windows
Go to Settings to activate Windows.

DA_Assignment_....ipynb

Show all

