

Coding challenge

Python

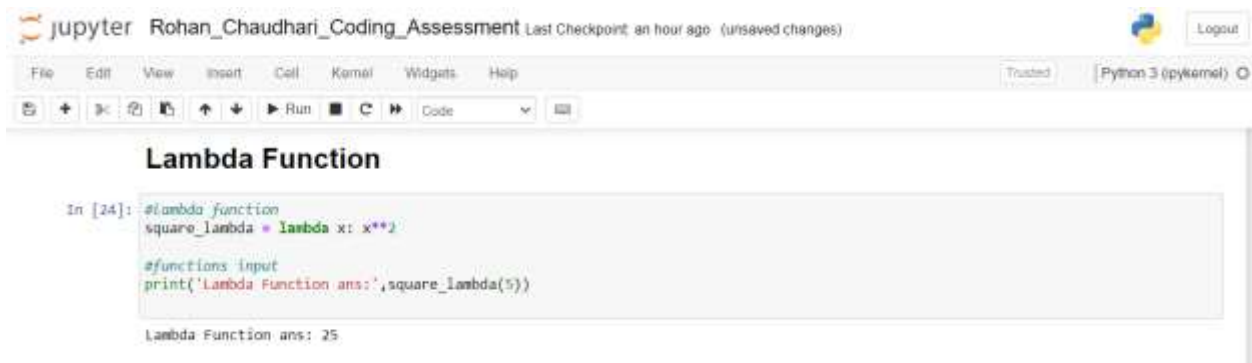
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Batch: Data Engineering 1

Question2: Execute with one example Lambda Functions in Python&Read JSON Strings to Python dicts

1)Lambda Function:

In this function we are getting a square a input int.



The screenshot shows a Jupyter Notebook interface with the title 'Rohan_Chaudhari_Coding_Assessment'. The notebook contains a code cell with the following Python code:

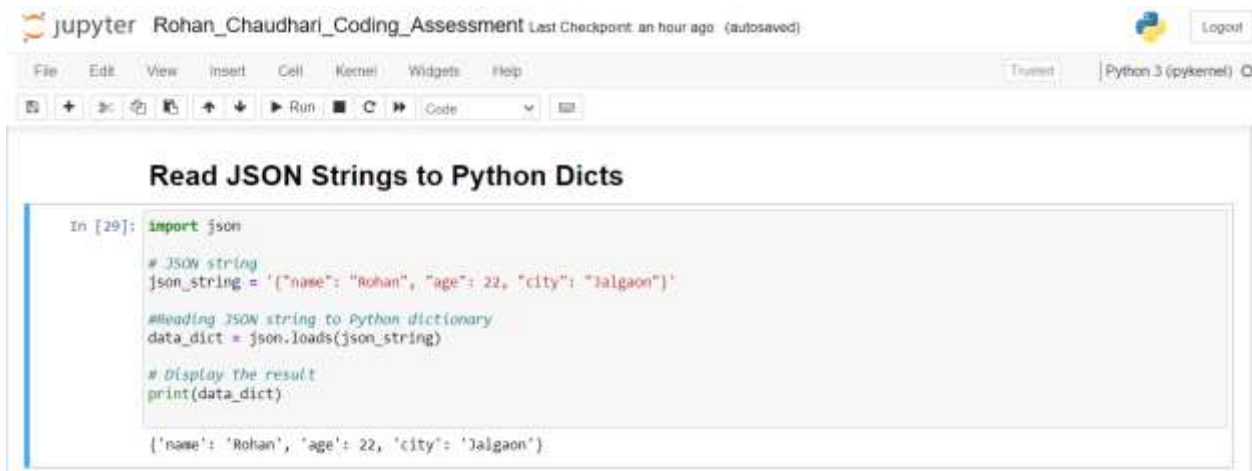
```
In [24]: #lambda function
square_lambda = lambda x: x**2

#functions input
print('Lambda Function ans:',square_lambda(5))
```

The output of the code is displayed below the cell: 'Lambda Function ans: 25'.

2) Read JSON Strings to Python Dicts:

Created a string and load it to json



The screenshot shows a Jupyter Notebook interface with the title 'Rohan_Chaudhari_Coding_Assessment'. The notebook contains a code cell with the following Python code:

```
In [29]: import json

# JSON string
json_string = '{"name": "Rohan", "age": 22, "city": "Jaigaon"}'

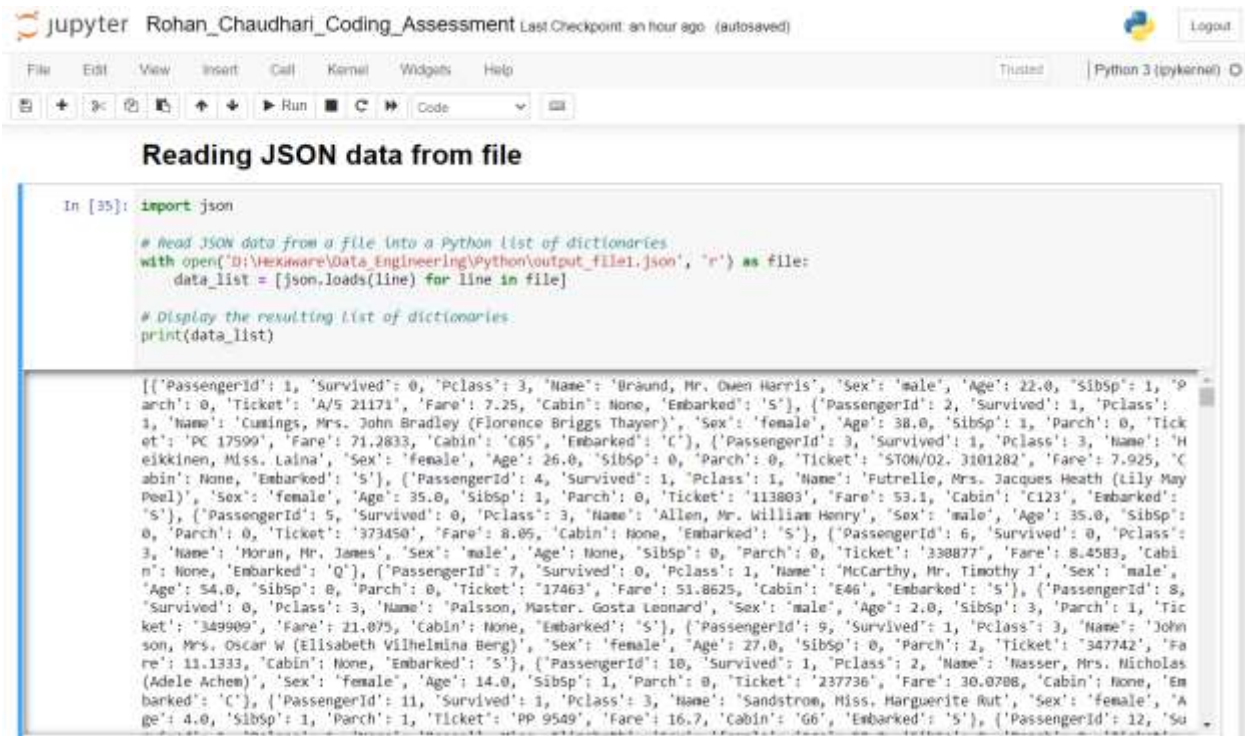
#Reading JSON string to Python dictionary
data_dict = json.loads(json_string)

# Display The result
print(data_dict)
```

The output of the code is displayed below the cell: {'name': 'Rohan', 'age': 22, 'city': 'Jaigaon'}

3) Reading JSON data from file:

Read data from a already existing json file



The image shows a Jupyter Notebook interface with the title "Rohan_Chaudhari_Coding_Assessment". The code in the notebook is as follows:

```
In [35]: import json

# Read JSON data from a file into a Python list of dictionaries
with open('D:\Hexaware\Data_Engineering\Python\output_file1.json', 'r') as file:
    data_list = [json.loads(line) for line in file]

# Display the resulting list of dictionaries
print(data_list)
```

The output of the code is a list of 12 dictionaries, each representing a passenger record. The first few records are:

- PassengerId: 1, Survived: 0, Pclass: 3, Name: 'Braund, Mr. Owen Harris', Sex: 'male', Age: 22.0, SibSp: 1, Parch: 0, Ticket: 'A/5 21171', Fare: 7.25, Cabin: None, Embarked: 'S'.
- PassengerId: 2, Survived: 1, Pclass: 1, Name: 'Cumings, Mrs. John Bradley (Florence Briggs Thayer)', Sex: 'female', Age: 38.0, SibSp: 1, Parch: 0, Ticket: 'PC 17599', Fare: 71.2833, Cabin: 'C85', Embarked: 'C'.
- PassengerId: 3, Survived: 1, Pclass: 3, Name: 'Heikkinen, Miss. Laina', Sex: 'female', Age: 26.0, SibSp: 0, Parch: 0, Ticket: 'STON/O2. 3101282', Fare: 7.925, Cabin: None, Embarked: 'S'.

The output continues with more records, including 'Futrelle, Mrs. Jacques Heath (Lily May Peel)', 'Allen, Mr. William Henry', 'Moran, Mr. James', 'McCarthy, Mr. Timothy J', 'Palsson, Master. Gosta Leonard', 'Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)', 'Nasser, Mrs. Nicholas (Adele Achem)', and 'Sandstrom, Miss. Marguerite Rut'.