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Topics : Python Coding Challenge Q2
Batch : Data Engineering Batch-1

Q. Execute with one example Lambda Functions in Python & Read JSON Strings to Python dicts or lists.

Lambda Function :

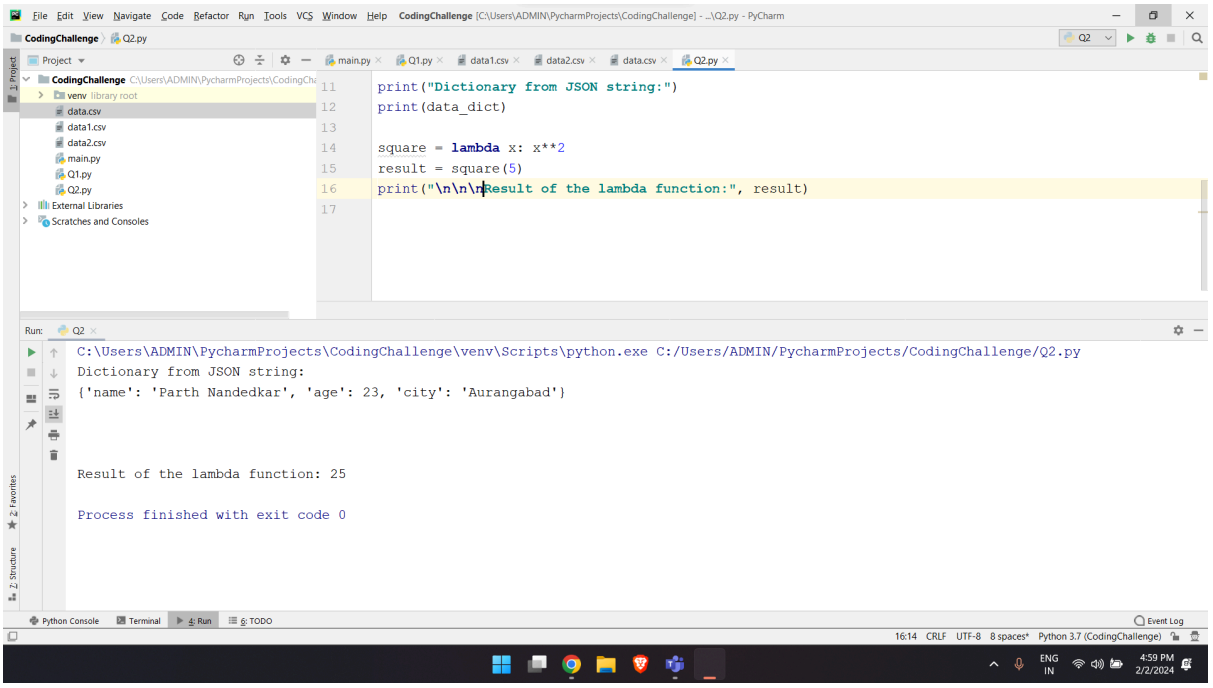
A lambda function is a small anonymous function defined using the lambda keyword. It's a quick way to create a simple function without formally defining it using the def keyword.

Syntax : lambda arguments : return_expression

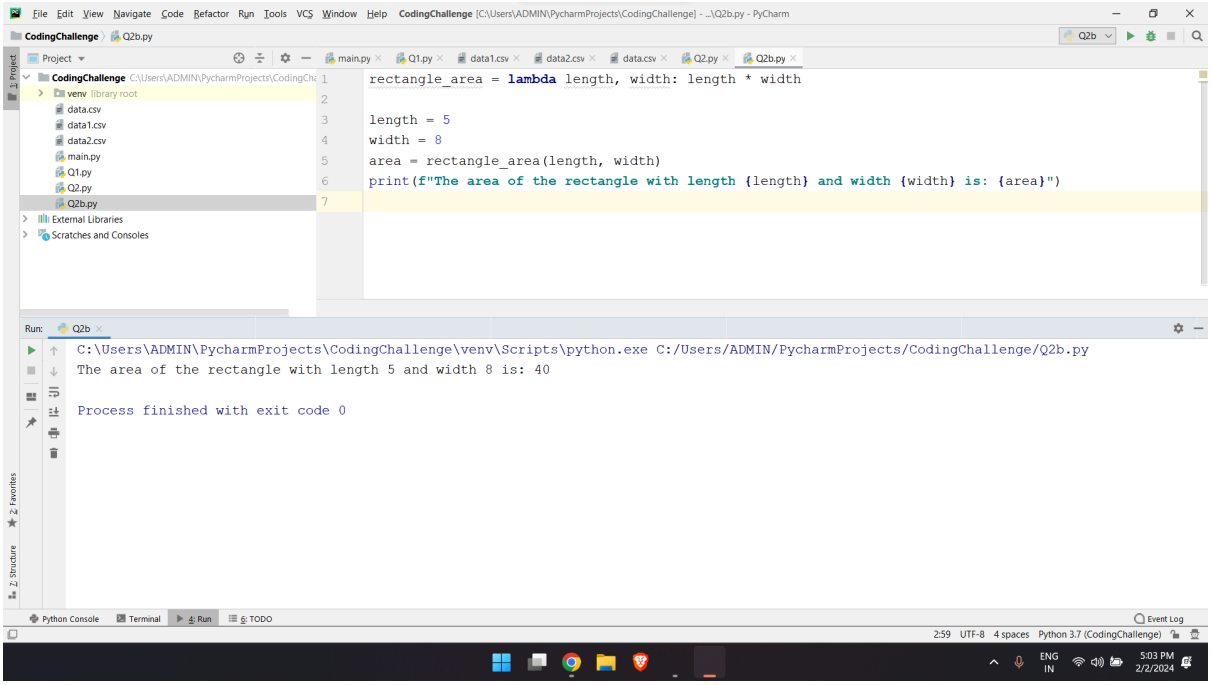
Example,

square = lambda x: x**2

If we call above lambda function as square(num),
It will return the square of the given ‘num’ value.



Example of rectangle area of lambda function :



lambda length, width: length * width: Defines a lambda function that takes two parameters, length and width, and returns their product.

rectangle_area = lambda length, width: length * width: Assigns the lambda function to the variable rectangle_area.

area = rectangle_area(length, width): Calls the lambda function with the given length and width.

print(f"The area of the rectangle with length {length} and width {width} is: {area}"): Prints the calculated area.

In this example, the lambda function calculates the area of a rectangle given its length and width.

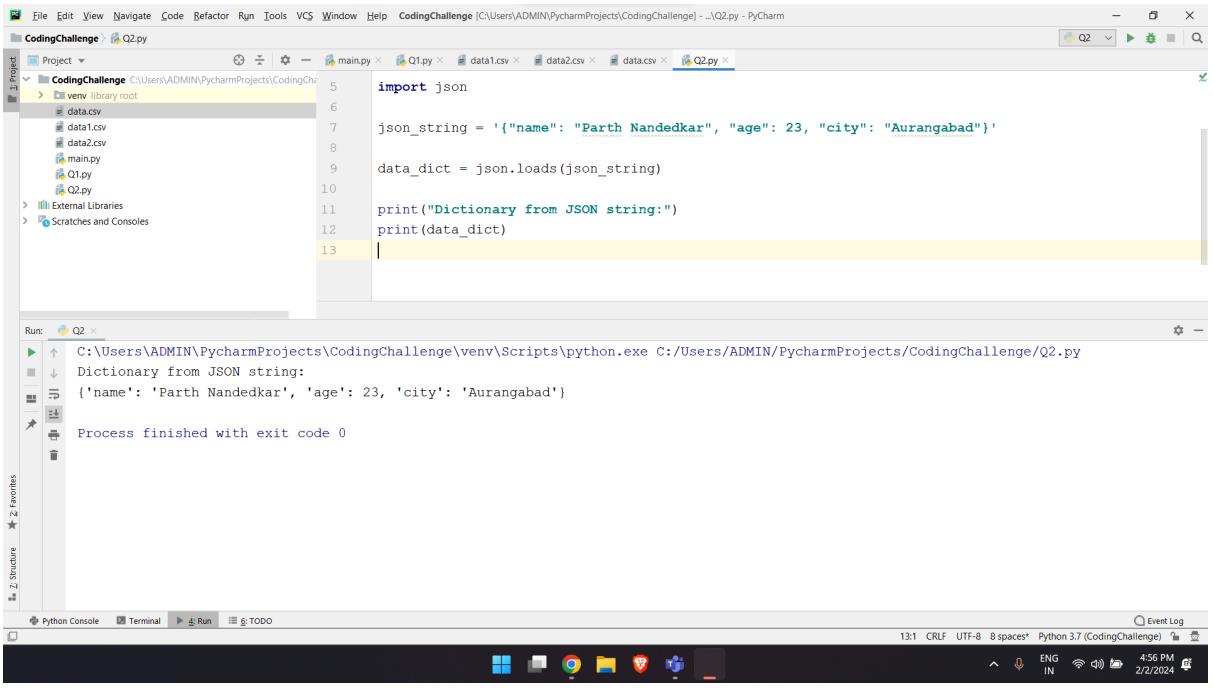
JSON String :

It is JavaScript Object Notation , this type of file is used in web based applications to store data . The data is stored in key value pairs it is in '{}' Curly braces.

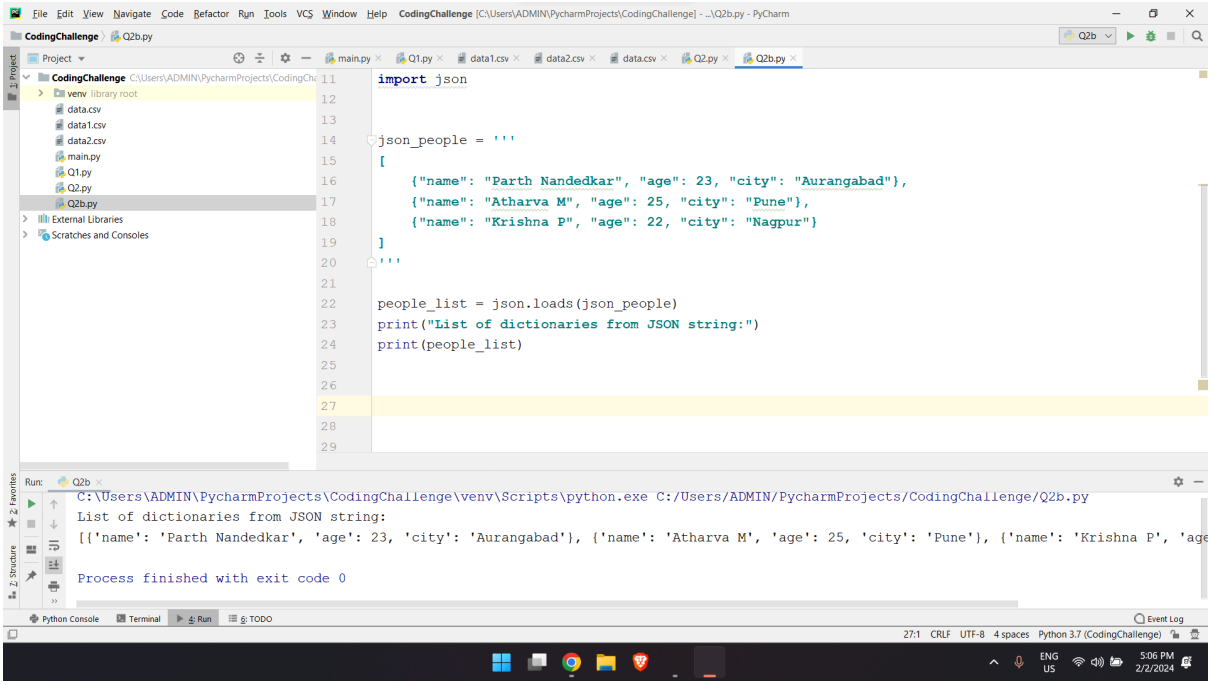
For example,
{
'Name' : 'Parth,'
'Age' : 23,
'City' : 'Aurangabad'
}

So these types of strings are called JSON strings.

I have implemented the program to get Dictionary object from JSON string :



Example of another JSON Strings to python Dictionary :



json_people: Defines a JSON string representing a list of people.

json.loads(json_people): Uses the json.loads function to parse the JSON string into a Python list of dictionaries (people_list).

print("List of dictionaries from JSON string:"): Prints the resulting list of dictionaries.

In this example, json.loads is used to convert a JSON string into a Python list of dictionaries representing people.