

REQUIREMENTS:

1. Python 3 is required and Installed
2. I have used Mac OS as my operating system and used IDLE as my development IDE, this code will work on any IDE that has Python 3 configured.
3. Downloaded the dataset from the link provided and based on the information from the recruiter/Agent I used 2016 Dataset.
4. The code consists of my dataset location in my laptop so request you to change it to your local directory

Running the Program:

1. Open the `"""bink_code_assignment"""` within the IDE and hit Run the module/program.
 2. It will display below output based on the 4 Requirements
Please select the below options
 1. List top 5 Current Rent Amounts
 2. Get Lease data equal to 25 years
 3. Get Tenants & Masts information
 4. Get Lease data between 1 June 1999 and 31 Aug 2007
 5. ExitEnter Option:
 3. Enter any number 1-5 to see the output and Enter 5 to exit the console.
 4. Open `"""bink_code_testcases"""` to run the Unit Test of the Solution.
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Actions:

1. Load the data file, process and output the data in the forms specified.
2. Read in, process and present the data as specified in the requirements section.
3. Demonstrate usage of list comprehension for at least one of the tasks.
4. Allow user input to run all your script or run specific sections. For example, just display section3 in the requirements below.

Solution:

The above 4 actions on the dataset will be satisfied with the function `"""def load_csv(csv_path):"""` Written in the program file and performs the operations. (Note: The dataset used is 2016).

Requirement 1:

Read in the attached file and produce a list sorted by Current Rent in ascending order. Obtain the first 5 items from the resultant list and output to the console.

Solution to Requirement 1:

The Function `"""def sort_rent(csv_list, sort_elements=5):"""`

Requirement 2:

From the list of all mast data create new list of mast data with Lease Years = 25 years.

Output the list to the console, include all data fields.

Output the total rent for all items in this list to the console.

Solution to Requirement 2:

The Function `"""def get_lease_data (csv_list, lease years=25):"""`

Requirement 3:

Create a dictionary containing tenant name and a count of masts for each tenant. Output the dictionary to the console in a readable form.

Solution to Requirement 3:

The Function""" def get_tenants_info(csv_list):"""

Requirement 4:

List the data for rentals with Lease Start Date between 1 June 1999 and 31 Aug 2007.

Output the data to the console with dates formatted as DD/MM/YYYY.

Solution to Requirement 4:

The Function""" def get_lease_range (csv_list, start_date, end_date):"""

Notes:

1. I have written the code entirely in Python 3 and keeping in mind not to use the Pandas.
2. Firstly, I manipulate the data (CSV File) and utilized its headers to perform my requirements
3. I have written a unit test to the whole solution
4. I didn't understand **Action No:3 Allow user input to run all your script or run specific sections. For example, just display section3 in the requirements below**, based on the understanding the requirement I have written the solution, but I am not sure whether I have satisfied the action/requirement.
5. I didn't write any test to the code as mention under the **Helpful tips**, due to not able to figure out exactly what kind of test I should do.
6. A Simple test was **"I have entered different number other than 1-5 in the console"** and the output was **"Enter Option"**.
7. Based on the understanding I have in programming this is my solution but in real time I may ask few more questions to get a better understanding of the requirements and try to develop a better solution (For Example Front-end webpage/Form) or something else.

Thanks