Vehicle Traffic at Border 1

The table below is a **partial** capture of the number of vehicles crossing the US-Canada border from various cities in Washington State for the 10-year period from 2010 to 2019, ordered by city.

The complete table is available on the LMS as vehtrafficusc_dataset.pdf and as vehtrafficusc _dataset.csv.

City	2010	2011	2012	2013	2014
Anacortes	29057	30979	31746	32964	31738
Boundary	65048	72107	62209	64351	57882
Danville	54919	63034	60563	58634	52971
Frontier	42048	46313	46377	50835	49743
Laurier	54251	52889	54353	55951	61454
Port Angeles	57978	56881	58107	107629	57965

In this project, your Python program is required to:

- Initialise appropriate lists with the **full** data
- Show four different menu options plus a Quit option.

  Based on the user selection, your program shall
  1. Display the number of vehicle crossings by city in 2012.
  2. For a user selected city (e.g., Danville),
     a) display the mean of the number of vehicle crossings for the 6-year span 2010 to 2015.
     b) display the years and the number of vehicle crossings in that period which fall below the mean found above.
  3. For a user selected city, display the years and the number of vehicle crossings if the number vehicle crossings had increased by at least 6% over the previous year.
  4. Make the following plots
     a) Number of vehicle crossings from Danville, Frontier (in each year) vs Year as line plots.
     b) Number vehicle crossings from Laurier, Port Angeles vs Year as a bar chart.

You will be awarded higher marks if you have the following features in your program:

- Retrieve the data from the CSV file and store them into lists
- Use numpy or 2D lists/arrays
- Plot the data with properly labelled titles, labels and legends
- Use functions that you define (and initialise lists for storing data if your program doesn't retrieve them from the CSV file) in a module called data.py