



Guided Task 7: File I / O

Objective

In this lab you'll read a given dataset and produce summary statistics for it.

Data

You'll be working with the car manufacturing data below:

	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Ford Motor Company	16,629	10,390	40,755	18,074	19,892	22,049	17,049	10,764
Volkswagen UK	13,224	7,960	38,335	15,161	15,737	20,474	15,183	11,334
Mercedes-Benz UK	12,249	6,088	33,536	11,739	14,431	14,947	12,056	5,040
Vauxhall Motors	12,250	4,905	37,769	10,639	13,461	15,540	10,398	4,864
BMW	9,553	6,870	30,330	10,868	12,415	19,985	9,198	4,853

We've stored the above info into a partial CSV (comma separated values) format file called *carSale.csv* as seen below.

Ford Motor Company
16629,10390,40755,18074,19892,22049,17049,10764

Volkswagen UK
13224,7960,38335,15161,15737,20474,15183,11334

Mercedes-Benz UK
12249,6088,33536,11739,14431,14947,12056,5040

Vauxhall Motors
12250,4905,37769,10639,13461,15540,10398,4864

BMW
9553,6870,30330,10868,12415,19985,9198,4853



Instructions

Your task is to read the data and display the following stats:

1. Sum of cars sold in each month.
2. Total yearly sales by each manufacturer.

To prepare your data for these calculations, follow these steps:

1. Create two Lists as:

```
companies = []  
sales = []
```

2. Read all the lines from `carSale.csv` file.
3. Loop through the resulting lines and place companies into the companies List (using the `append()` method) and then place the data line into the sales.

Tip 1: Go through the lines that you've read in steps of two as follows:
for x in range(0, len(lines),2):

Tip 2: Make a numeric List out of the sales data line using code as follows:

```
data = line.strip().split(',')  
sales.append(list(map(int,data)))
```

4. Now that you've got all the data in Lists, you can do the calculations.

The result will be as follows:

```
63905  
36213  
180725  
66481  
75936  
92995  
63884  
36855  
Grand total: 616994
```

Well done, you've completed this guided task!