Datafile Parsing

- Submit a single file `dataparsing.py` .
- The file `cardata.csv` contains some information about persons and their cars.

1. Write a function `parse_cardata()` that reads the file and parses the data into an appropriate datastructure say `cardata` and returns it. The choice of the datastructure is yours.
2. Write a function `cars_vs_age(cardata,bucketsize)` that returns a histogram (as a dictionary), such that for each car we can know how many owners are there in an age range (defined by bucketsize).
    - For example, if `bucketsize=5` ,then ``histogram["Creta"]["35-40"] should return how many people own a creta in the age range 35-40.
3. Write a function `age_vs_cars(histogram)` that inverts the histogram created by `cars_vs_age(cardata,bucketsize)` such that `new_histogram["35-40"]["Creta"]` gives me how many people own a creta in the age range 35-40.
4. Write a function `company_vs_cars(cardata)` that returns a map such that, `company_vs_cars_map["Google"]` gives the list of cars owned by people in Google ordered ordered by descending frequency.
5. Using these functions, answer the following questions and print the answer
    A. Which is the most popular car for each age group (bucketsize=5)?
    B. Which age group is each car most popular with?
    C. Which cars are most popular in each company?
    D. Which car is the best car? (A car gets 1 point if it is in the top 2 of a company. The car with the maximum points is considered the best car.)

Hint for Q.4 : Sorting the cars for each company can be accomplished in at least 2 ways

- Using tuples and the sorted() function - this has not been covered in class but is there in notes for 23_may.
- Using np.argsort.