The `homes.csv` dataset (available on the classnotes) shows attributes from a sample of residential houses. Each row includes the attributes of a house (described on page 2). Use python library Pandas to answer the following questions. For each one show the python command as well as the resulting output.

1. Find the number of houses from each style.
2. Find the smallest, median, and largest value for each numerical column in the dataset.
3. Find the most expensive house with at least three bedrooms.
4. List all houses having two to four bedrooms with area exceeding 4000 square feet and price not less than 350,000 dollars.
5. What is the average lot size of houses built after 1970?
6. On average how much more expensive are houses with a pool?
7. Use `groupby()` to find the lowest and largest prices of houses for each quality category.
8. Construct a cross tabulation table showing the number of houses classified by style (rows) and by number of beds (columns).
9. Create a table showing all attributes of the least expensive style 1 house.
10. Create a DataFrame having all the categorical columns only. Then for each column find the number of houses in each category.

Submit your report (with Name and USC ID) as a single pdf file. Report should not include incomplete python commands and screenshots.

- `Price` retail price
- `area` the area inside the building that is occupiable, up to and including the exterior walls
- `beds` the number of bedrooms
- `baths` the number of bathrooms
- `garage` the number of parking spots in the garage
- `year` construction year
- `style` the house style
- `lotsize` the total area of a property, including the yard up to the boundaries (property line)
- `ac` whether the house has air conditioning system
- `pool` whether the house has a pool
- `quality` the quality category of the house
- `highway` whether the house is close to a highway