The file `VIT.csv` contains a list of apartments from a real state agent in Vitoria, Spain, with variables:

- price (market price (Euros) of the apartment including garage(s) and storage room(s))
- area (living area of the apartment in square meters)
- zone (a factor for the neighborhood where the apartment location)
- category (a factor for the condition of the apartment, 2A is the best and 5A is the worst)
- age (age of the apartment, years)
- floor (floor number)
- rooms (number of rooms including bedrooms, dining room, and kitchen)
- out (factor indicating the % of the apartment exposed to the elements: Levels E100, E75, E50, and E25, correspond to 100%, 75%, 50%, and 25% exposure, respectively)
- conservation (factor for the state of conservation of the apartment. The levels 1A, 2A, 2B, and 3A are ordered from best to worst conservation.)
- toilets (number of bathrooms)
- garage (number of garages)
- elevator (number of elevators)
- street (category of the street with levels S2, S3, S4, and S5 from best to worst)
- heating (factor for the type of heating with levels 1A, 3A, 3B, and 4A corresponding to: no heating, low-standard private heating, high-standard private heating, and central heating)
- storage (number of storage rooms outside of the apartment)

Divide column `price` by 1000 to have apartment prices in thousands. Convert `toilets, garage, elevator` and `storage` to factors, then use RStudio to answer the following (10 pts each).

1. Find the number of apartments for each number of garages
2. Create a single chart showing boxplots for the apartment's price for each floor.
3. Create a single table showing the number of apartments for each number of rooms and number of garages.
4. Find the average apartment price (up to 2 sig. digits) for each category from question 3.
5. Find the min and max price of apartments with area between (including) 80 and 90 square meters.
6. What numeric variable is most correlated with price? Draw a scatterplot for `price` and this variable.
7. On average, how much more expensive is an apartment in street type S4 than one in type S2?
8. Create a scatterplot of y:price against x:age. Fit a regression line to display the average price trend as the apartment gets older. How much is the average price decrease for each additional year of age?
9. (20 pts.) The realtor thinks that in Vitoria, each square meter will cost roughly 2500 €. Create a scatterplot of y:price against x:area. Add a regression (red) line showing the price trend as the apartment area increases. What is your estimate of how much is the price increase by square meter?

Submit your report (code and output) as a pdf file onto Blackboard (no screen captures). Report must include the student name and USC ID.