

Ask

The questions I want to be answered in this analysis are:

- Which school has the highest grade
- Does Family size have anything to do with their grade
- Does their primary guardian affect their grade?

Prepare

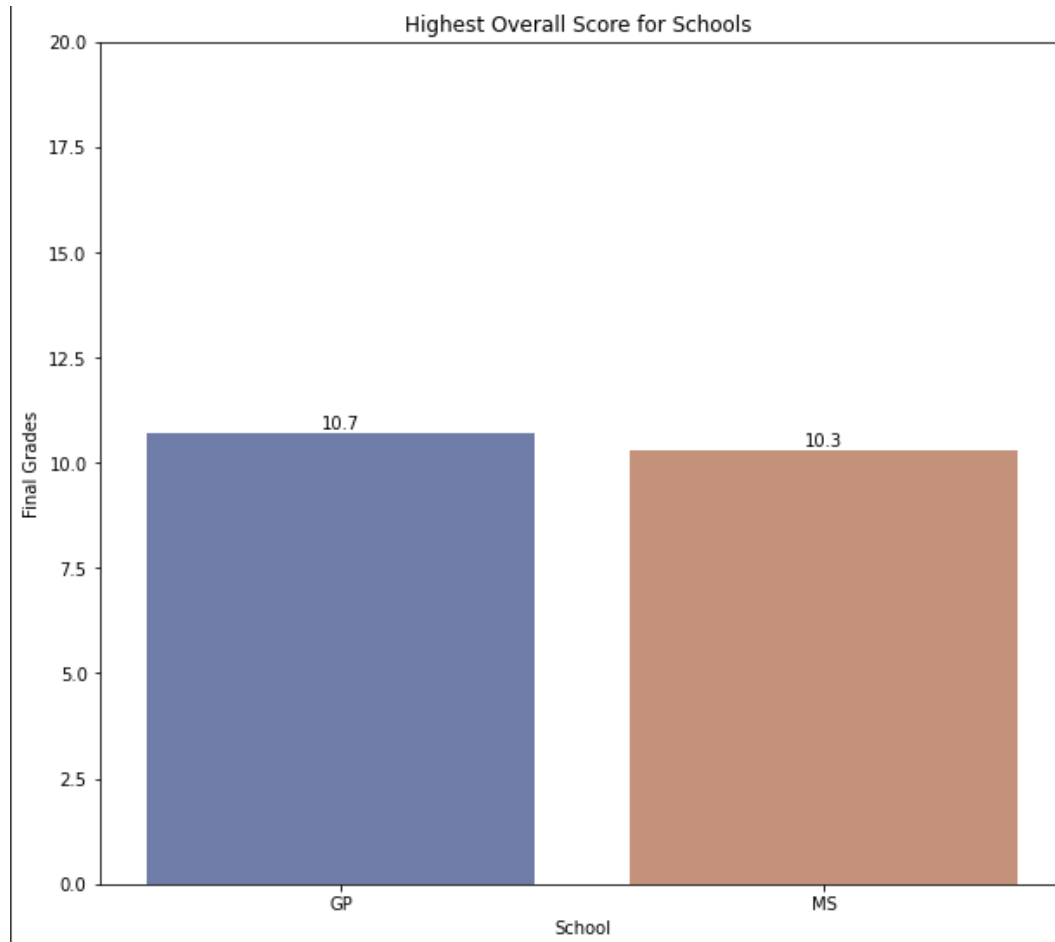
I got the dataset from [Kaggle](#). I contained a single CSV file containing information on multiple students' living situation and their grades.

Process

The first thing I did was inspect the CSV file for spelling and duplicates. This dataset was clean and there were no spelling errors or duplicates. Next, I submitted it to my notebook to analyze it. Then, I checked it for nulls and as mentioned before, this is a clean dataset so there were no nulls. So the only thing left for me to do was drop columns I had no need for. I dropped 'Pstatus', 'traveltime', 'famsup', 'nursery', 'higher', 'famrel', 'health' because I either had no need for them or had no idea what the variables meant. I also entered another column in the CSV file called final grade where I took an average of their 3 previous grades for a final grade.

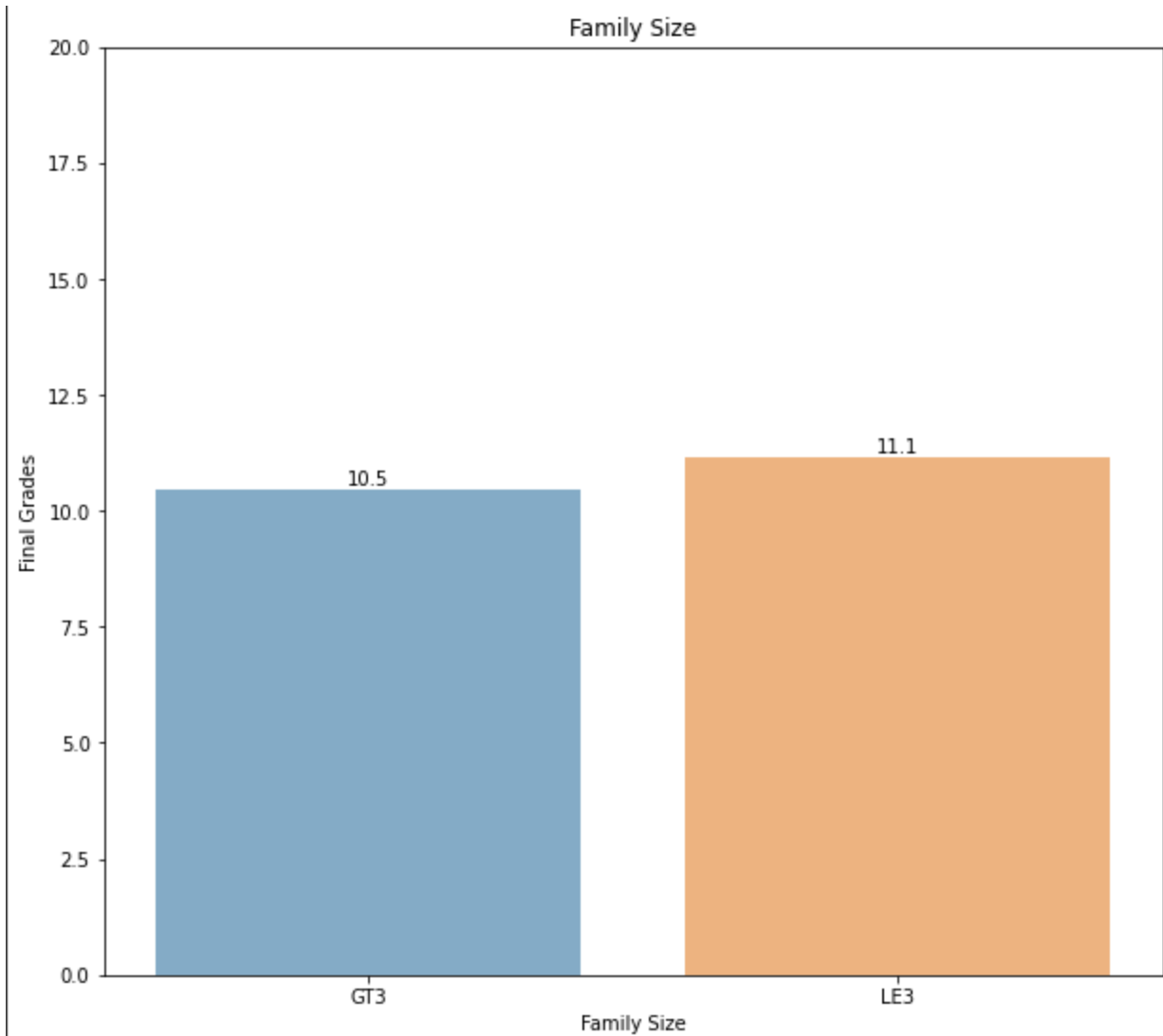
Analyze

My next step was to analyze the data. I started with the first question and this is what I found:



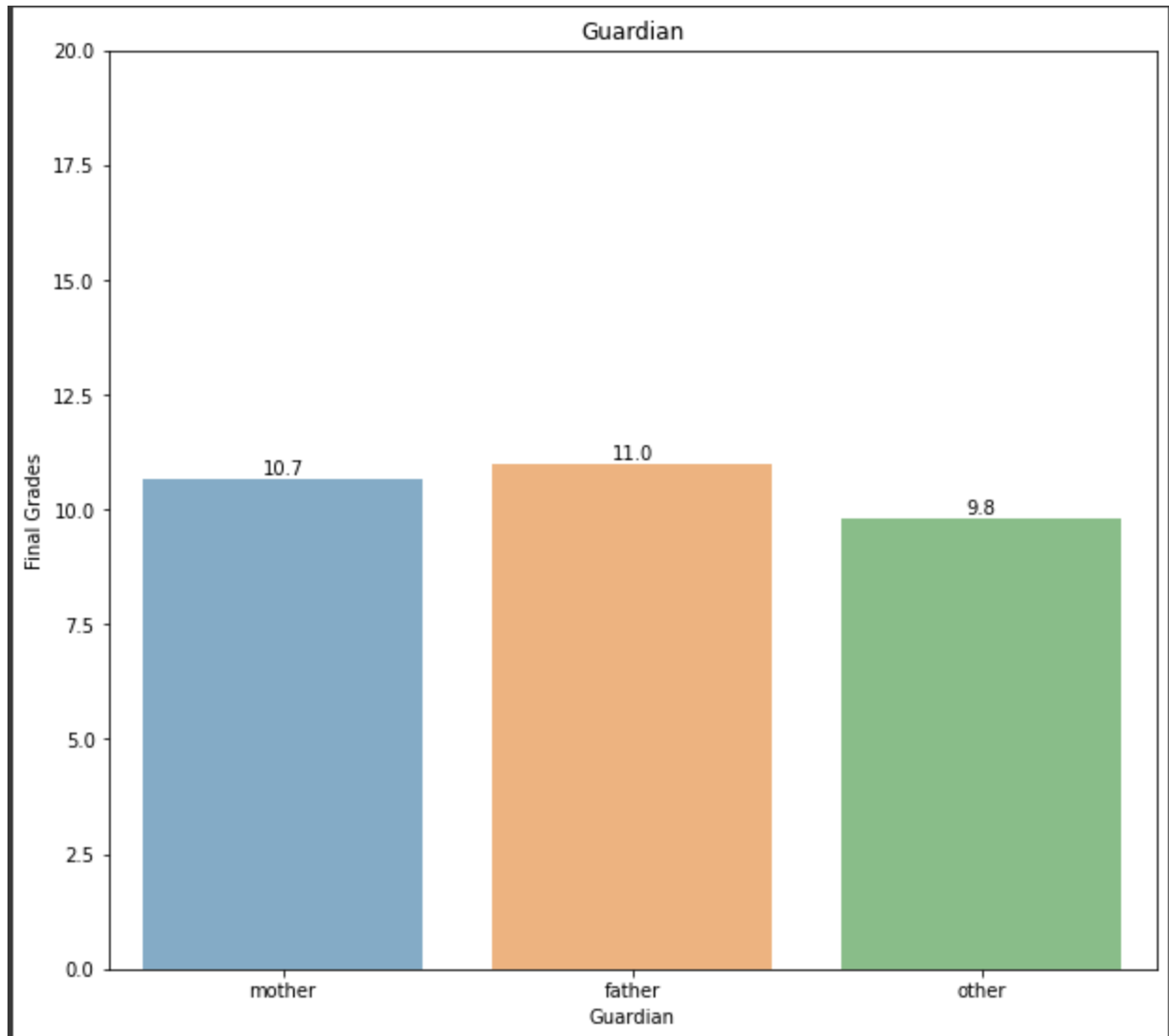
From this graph, we can see that the GP has a higher average for final grades. This can be the result of these two schools having two different curriculums, one being more difficult than the other

The second question asks 'Does Family size have anything to do with their grade'.



From the graph, we can see that families with a LE3 size generally have a higher score for their final grade. Maybe this means that LE3 families are bigger and have more resources to draw from. For example, this can mean that with bigger families you more than likely have older siblings you can ask for help.

Lastly to answer the third question 'Does their primary guardian affect their grade?':



We see that children with their father as their primary guardian have a higher final score. This can be for a number of reasons. Maybe they have a higher education or are in fields related to STEM.