1. Region and Domain State the region and the domain category that your data sets are about.

All of my datas are about the whole world.

2. Research Question You must state a question about the domain category and region that you identified as being interesting.

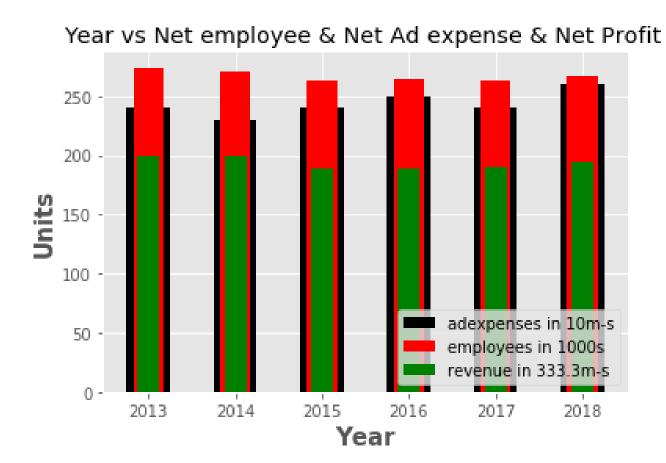
How the money spent on advertisement and hiring employee eff ect the net profit of PepsiCo? Is there any dependency?

3. Links You must provide at least two links to publicly accessible datasets. Thes e could be links to files such as CSV or Excel files, or links to websites which might have data in tabular form, such as Wikipedia pages.

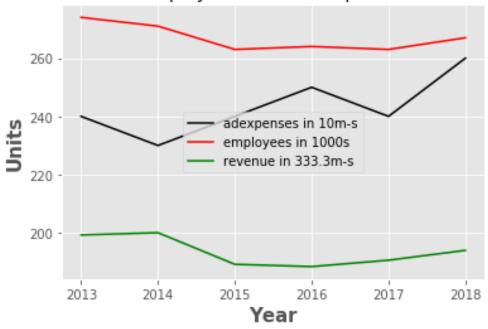
https://www.statista.com/statistics/286547/pepsico-advertising-spending-worldwide/

https://www.statista.com/statistics/233378/net-revenue-of-pepsico-worldwide/ https://www.statista.com/statistics/536974/pepsico-s-number-of-employees-worldwide/

4. Image You must upload an image which addresses the research question you stated. In addition to addressing the question, this visual should follow Cairo's p rinciples of truthfulness, functionality, beauty, and insightfulness.



## Year vs Net employee & Net Ad expense & Net Profit



## 5 Discussion You must contribute a short (1-2 paragraph) written justification of how your visualization addresses your stated research question.

In order to get more information from graphs, I decided to plot 2 graphs: linear graph and bar chart. Both describe the same data, namely, how the money spent on advertisement and hiring employee affects the profit of PepsiCo company. Bar chart is beautiful and helps us easily understand the dependency of above-mentioned factors separately for each year. However, linear plot is more insightful. We can see from there that in 2013-2014 PepsiCo had big profit even though it spent less money on ad. In 2014-2016, the company paid more money on ad, however the revenue did not rise.

But when the company hired more people and spent more money on ad during 2017-2018, the revenue starter to increase.

All in all, it is clearly seen that when the company had less revenue, they hired less people or vice versa, maybe the number of less employee lead to decreased revenue. But advertisement had strange effect on profit. When more advertisement, sometimes less profit, sometimes more profit