DS 0311-01 / Instructor: Norman Lo ( [lokman@mail.sfsu.edu](mailto:lokman@mail.sfsu.edu) ) / 07 October 2022

**DS 311 Group Assignment 1**

Tasks: Write a page of summary of the dataset includes 5 fun facts that your team found.  
The 1-page write up is not including your code or coding file.  
Push the coding file and summary report to the group project repository.

Fun facts about the dataset, option 2: “salary\_data\_states.xlsx”

After reading through the entire dataset once we realised that there were a lot of missing datapoints (“NaN”). We replaced those missing datapoints with “0”, “Unknown”, “Nothing” or “n” (Figure 1 replacing missing data).

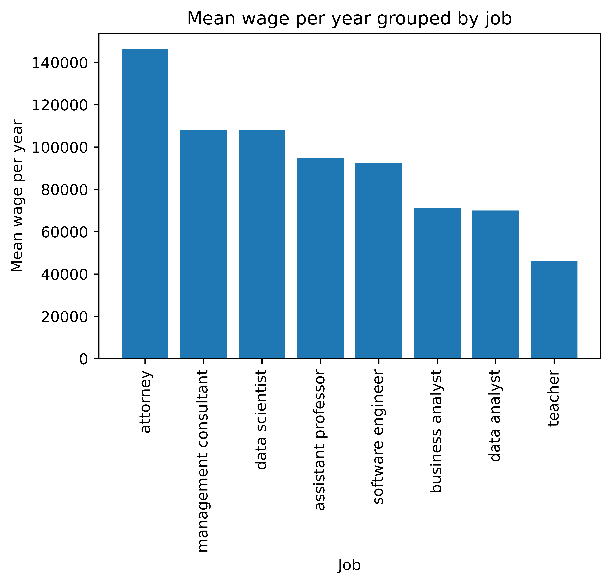
Fact number 1:

Figure Mean wage per year, grouped by job category

Sorting the mean wage per year by job subgroups, we can conclude that “attorney” related jobs make the most money, they make 140,000$ on average per year. The subgroup “teacher” is in last place and makes less than half of an attorney.

Fact number 2:

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Automatisch generierte BeschreibungSorting the mean wage per year by states, we can conclude that employees in “West Virginia” make the most money, they make around 109,000$ per year. We displayed the top 5 states in (Fig2)

Figure Mean wage per year, grouped by state.

Fact number 3:

The mean salary per year in San Francisco is around 123,850$

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Automatisch generierte BeschreibungFact number 4:

Looking at who makes the most money per year as a single person, we can see that there are a few attorneys that make substantially more than the rest in the dataset. Number 1 to 5 are attorneys that each make over a million more than number 6.

Figure Best paid people with job and city.

Fact number 5:

Considering the diversity within companies, we wanted to look at how salaries of those on work visas compare to green card holders. The data was sorted by job title subgroup, visa class, and lastly by organizing the mean paid wage per year. Across the board we note that those not holding green cards are paid significantly less than green card holders. The most notable jump is a data scientist from Chile gets paid a mean annual wage of 90000.00 compared to a greencard holder who makes 116507.76, the amount of experience would have to also be analyzed to gather more conclusive results. When isolating wage by visa status we can notably see that greencard hol-ders on average make more than those on work sponsored visas.

Summary:

To summarize our initial look at the dataset, we can say that…(not finished yet)

**Code screenshots attachment:**

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Figure replacing missing data

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Figure Code for fact 1

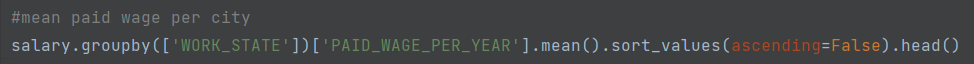


Figure Code for fact 2



Figure Code for fact 3

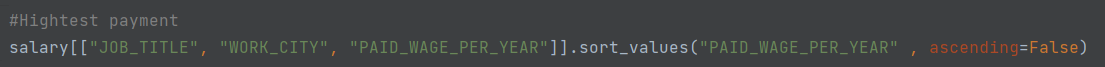


Figure Code for fact 4