Tools Used:

- Python
- Pandas
- NumPy
- Matplotlib
- Seaborn

Questions Asked:

1. Is there a correlation between gender and treatment seeking?
2. Is there a correlation between days spent indoors and social weakness?
3. Is there a correlation between occupation and growing stress?
4. Is there a correlation between family history and personal mental health history?
5. Is there a correlation between mood swings and work interest?

Insights that were Discovered:

1. From the data, we can answer question 1 by saying, proportionately, men seek treatment less than women. About 70% of women in the dataset seek treatment, whereas only about 45% of men seek treatment. Therefore, interventions, policies, and support systems should prioritize marketing towards males.

2. From the data, we can answer question 2 by saying that those who go out every day report the lowest amount of social weakness. However, the quantitative data of all 4 columns are quite similar. Therefore, the data is somewhat inconclusive and we cannot make any generalizations/predictions.

3. From the data, we can answer question 3 by saying that the highest growing stress is found amongst the corporate individuals, students, and housewives. However, there's also a high number of corporate individuals and housewives that did not experience growing stress. Thus, one could assume that students have the highest rates of growing stress. However, this data is not concrete enough to support assumptions that occupations are directly responsible for growing stress due to the high number of maybes.

4. From the data, we can answer question 4 by saying, amongst the data of individuals with mental health history, there is a higher occurrence amongst those without family history. Surprisingly, this trend is also observed in two other groups of mental health history. Therefore, family history is not a good indicator of having mental health struggles.

5. From the data, we can answer question 5 by saying that there is a strong correlation between a medium level of mood swings and no work interest. There is also no

correlation between mood swings and 'yes' for work interest. This heatmap proves that those who suffer from mood swings are less productive/willing to work. Mental health resources and methods to deal with mood swings should be provided by corporate workplaces to ensure worker productivity.

Recommendations:

This information is useful in the sense that it confirms common stressors to mental health regardless of age or gender (occupation, days spent indoors, mood swings, etc.). However, I would recommend that a client should analyze another dataset with more specific questions where people have the ability to elaborate on their feelings. This dataset was derived from a multiple-choice survey so the analysis is limited. Analyzing a better dataset will yield more profound insights.

Future Work:

The dataset offers opportunities for developing predictive models to identify or predict mental health outcomes based on textual data. In the future, I would like to employ a few machine learning techniques to group the data and predict the trajectory of a person’s mental health. This can be useful for early intervention and support.