Mood Scriber: Data Challenge '24

Sample dataset – Input.xlsx.

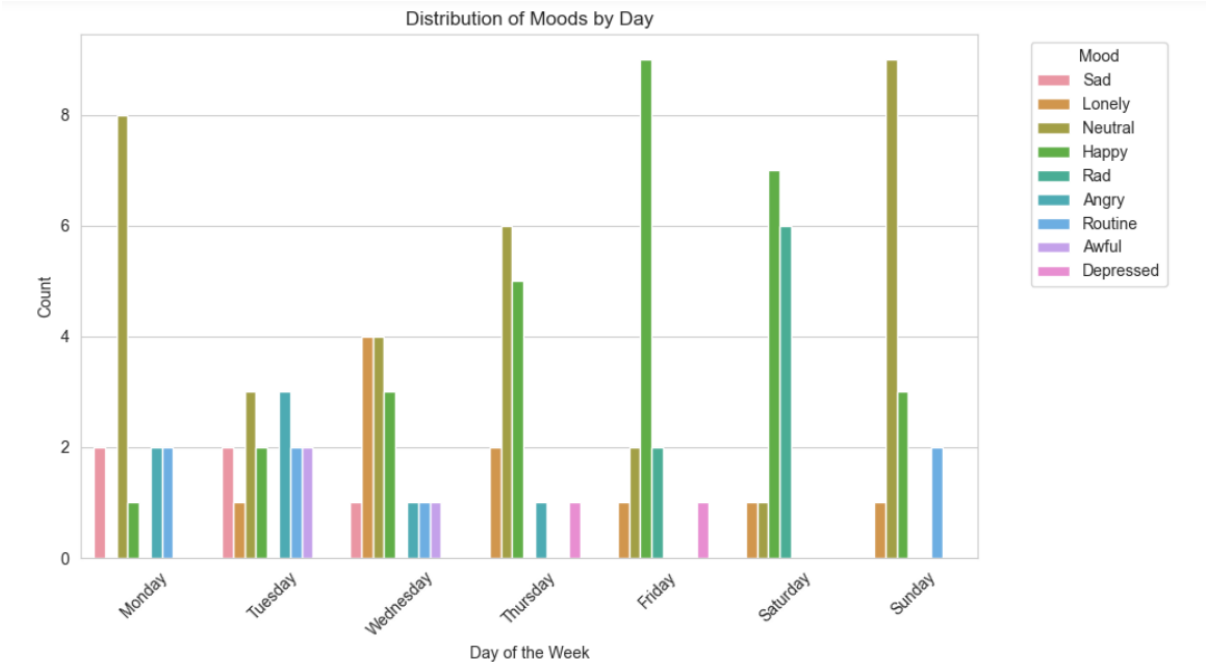
Initially, the excel file consisted of four key columns- ***Day***, ***Mood***, ***Activity-1*** *and* ***Activity-2.*** By incorporating additional columns (***Sleep Quality***, ***Productivity Score***, ***Energy Level*** *and* ***Notes/Comments***), we can gather more comprehensive insights from the data.

Day	Mood	Activity-1	Activity-2	Sleep Quality	Productivity Score	Energy Level	Notes/Comments
Monday	Sad	Work	Heavy Workload	Poor	2	Low	Feeling overwhelmed
Tuesday	Sad	Relationships	Argument	Poor	2	Low	Argument with partner
Wednesday	Lonely	Routine	Daily Monotony	Fair	6	Medium	Feeling isolated
Thursday	Neutral	Routine	Daily Monotony	Good	7	High	A good and productive day
Friday	Happy	Leisure	Friends Gathering	Excellent	9	High	Enjoyed with friends
Saturday	Rad	Leisure	Friends Gathering	Excellent	8	High	Fun day
Sunday	Neutral	Self-Improvement	Study	Good	8	High	Focused on learning
Monday	Neutral	Work	Heavy Workload	Fair	7	High	Meeting deadlines
Tuesday	Happy	Work	Project Success	Excellent	10	High	Successful completion
Wednesday	Lonely	Relationships	Feeling Lonely	Poor	3	Low	Need emotional support
Thursday	Lonely	Relationships	Feeling Lonely	Poor	3	Low	Feeling isolated
Friday	Happy	Leisure	Friends Gathering	Excellent	9	High	Enjoyed with friends
Saturday	Rad	Leisure	Friends Gathering	Excellent	8	High	Exciting day
Sunday	Lonely	Relationships	Feeling Lonely	Poor	3	Low	Just a bad day

From the provided data, we can extract several insights about the person's mood, activities, sleep quality, productivity score, and energy level over the course of multiple days.

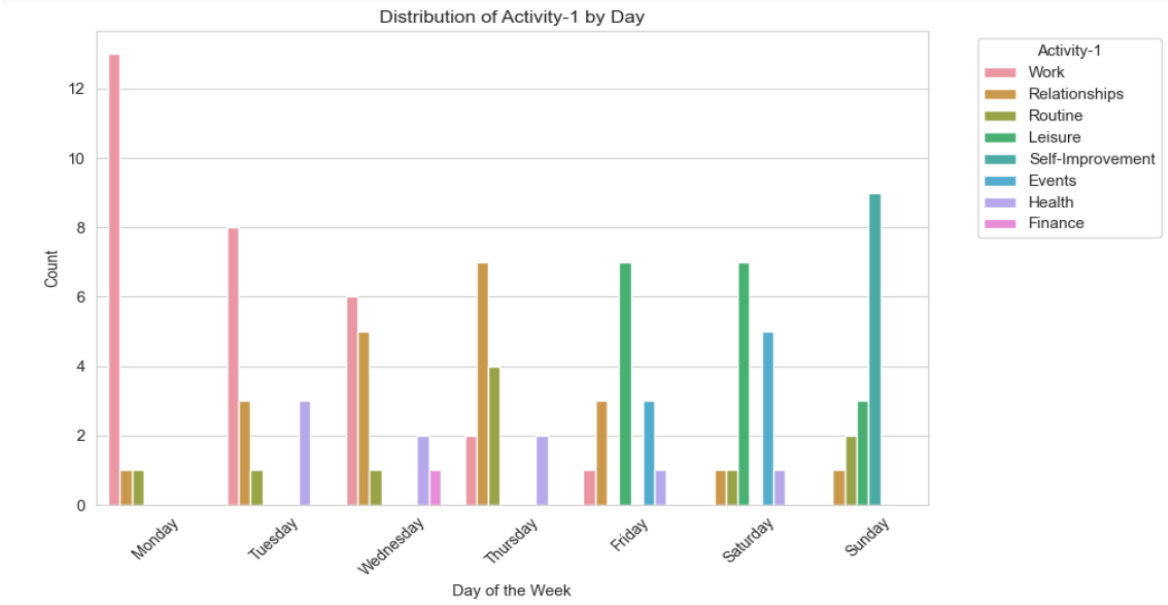
Mood Patterns:

The person went through many different feelings during the week, like **Sad, Lonely, Neutral, Happy, Rad, Angry, Routine, Awful and Depressed**. Some emotions appeared more often on certain days. For instance, feeling **Lonely** was common on **Wednesday** and **Thursday**. What's interesting is that the person mostly felt **Neutral** and **Happy**, and rarely felt **Awful** and **Depressed**. This suggests that the person generally had a good week emotionally, with more positive feelings than negative ones.



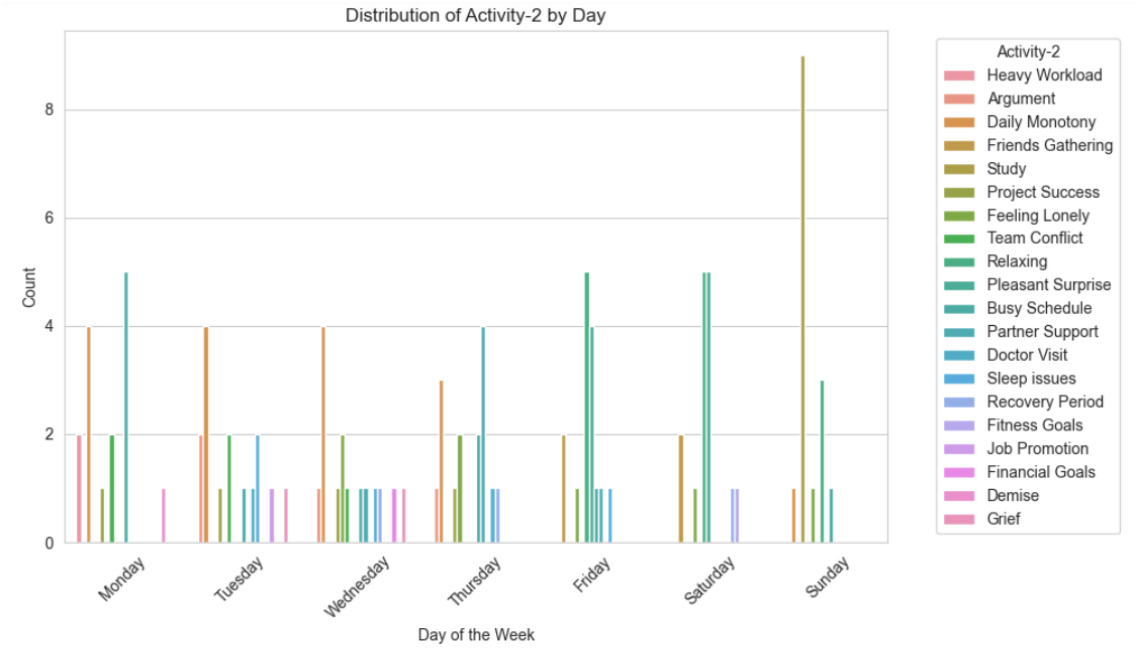
Distribution of activities:

When we looked at the distribution of Activity 1, we noticed that the person did a lot of **Work** and spent time on **Relationships** and **Leisure** more as compared to other activities. On the other hand, activities related to **Health** and **Finance** were the least common. We also found that activities like **work**, **relationships** and **routine** were more common on weekdays, while activities like **self-improvement** and **leisure** were more common on weekends.



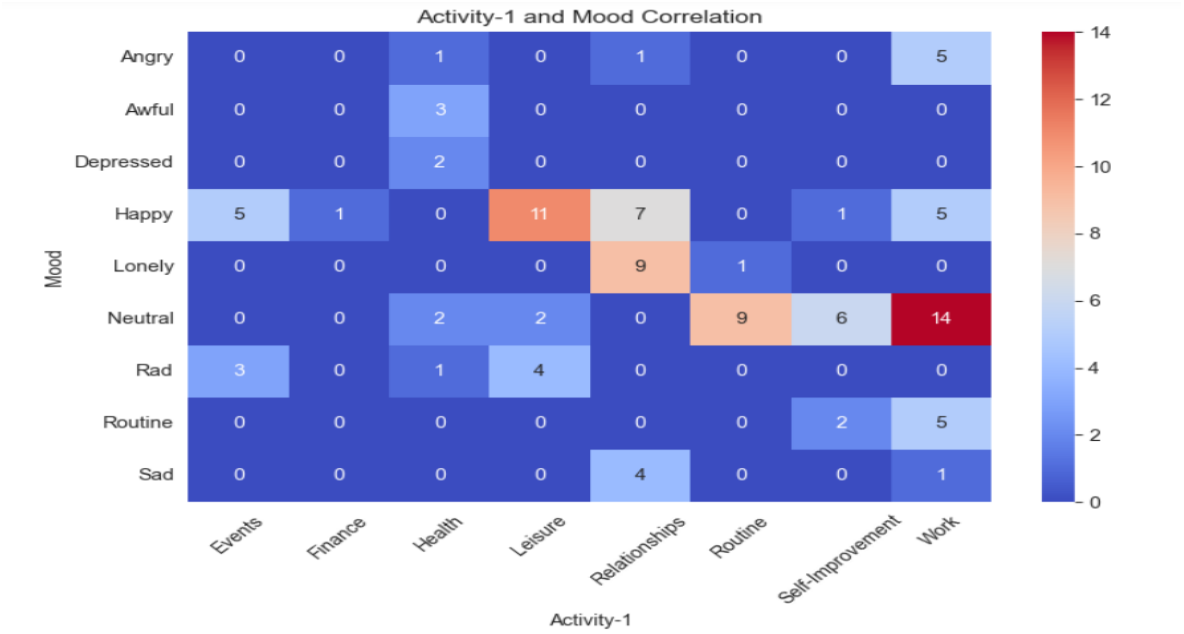
When we analysed the distribution of Activity 2, we found that the most common activity was **daily monotony**, followed by **relaxing** and a **busy schedule**.

Also, we found that **Mondays** stood out as the busiest days, with the highest frequency of **busy schedules**. Sundays, on the other hand, were primarily spent **studying**. Additionally, activities like **doctor visits, financial goals, job promotions, fitness goals, and dealing with demise** occurred the least frequently, with a frequency of 1.

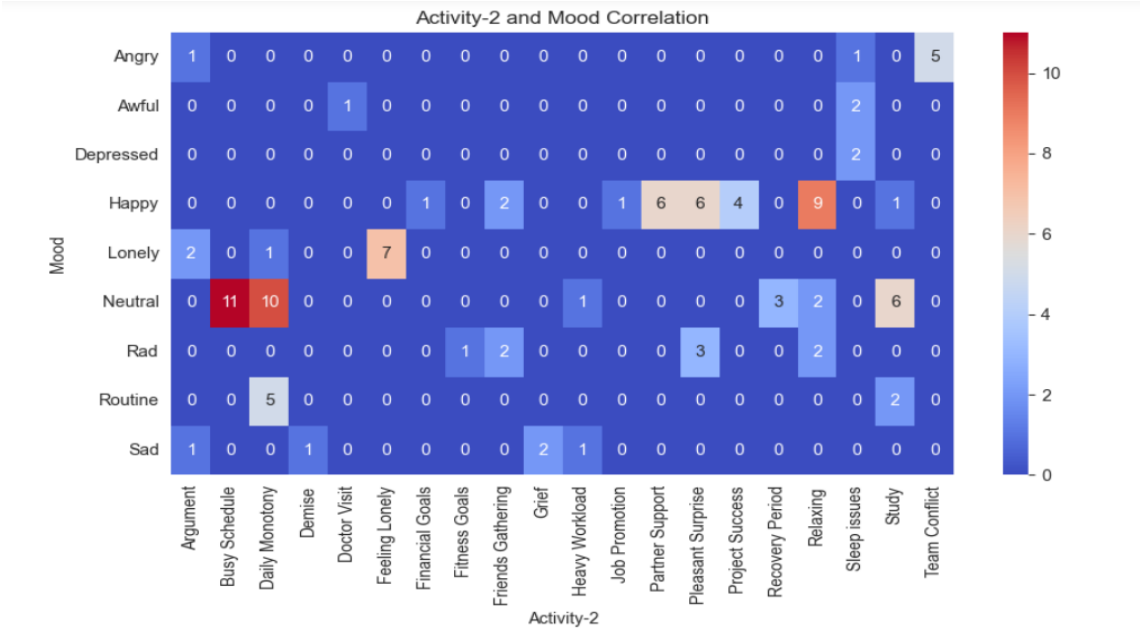


Activity and Mood Correlation:

This heatmap reveals that the person maintains a **neutral** mood while engaging **in work-related**, **self-improvement** and **routine** tasks. The **leisure** activity is primarily associated with positive emotions, with **Happy** being the most frequent mood occurrence. Activities related to **relationships** elicit a mix of emotional responses, including both positive (**Happy**) and negative (**Lonely**, **Sad**) moods.

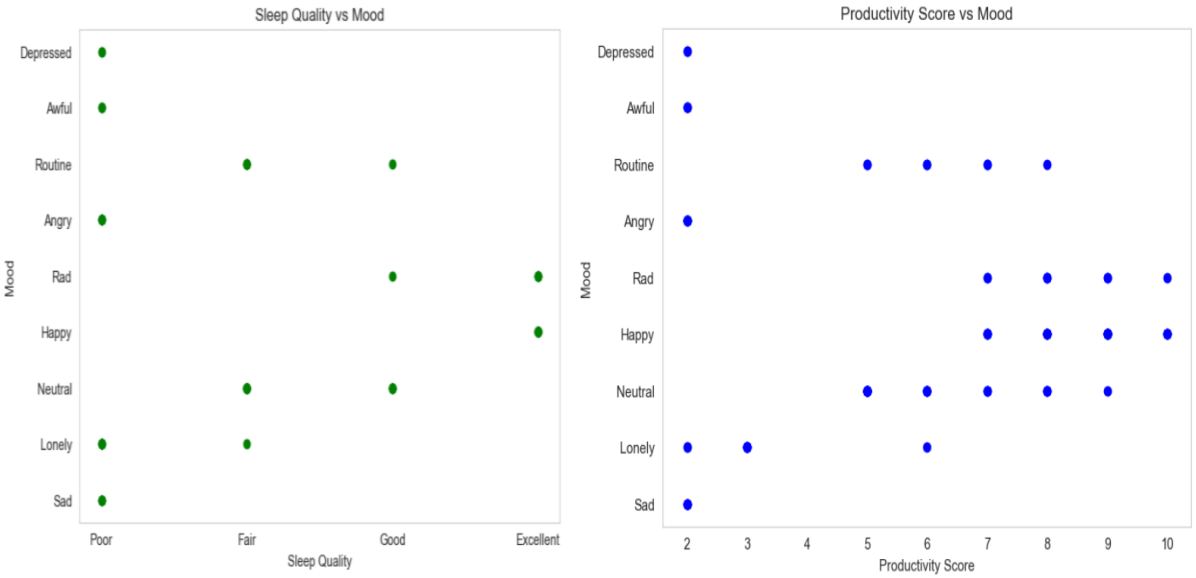


For Activity-2, **Neutral** is the most common mood for both **'busy schedule'** and **'daily monotony'** activities. Certain activities seem to be associated with particular mood states. For instance, feeling **Sad** is linked with **Heavy Workload** and **Angry** is due to the **Team Conflict**, while feeling **Happy** or **Rad** is associated with social activities like **Friends Gathering**, **Pleasant surprise** and **Relaxing**.



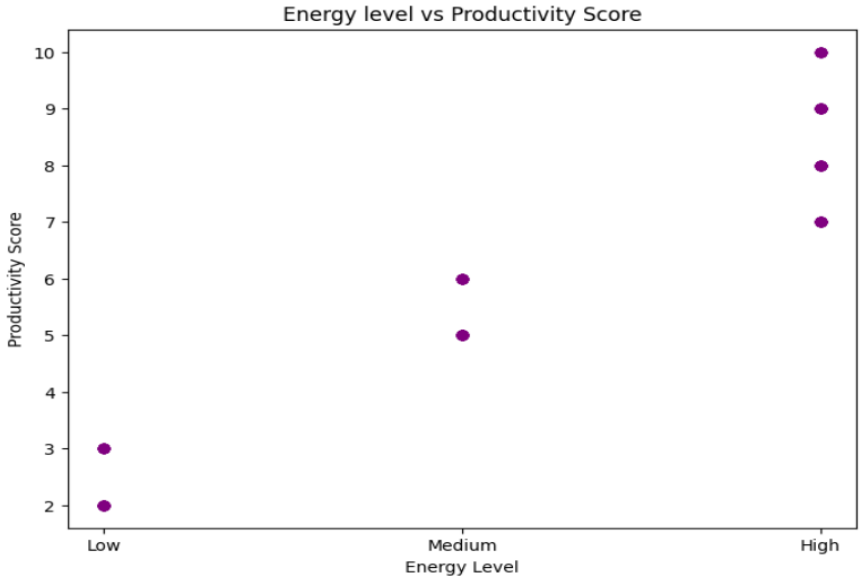
Sleep Quality and Productivity score:

We observed that when the person experienced negative emotions such as **depression**, **loneliness**, **anger**, **or sadness**, their sleep quality tended to suffer, leading to lower productivity score. This suggests that emotional distress can significantly impact both sleep patterns and the ability to perform tasks efficiently. Days with higher mood states, such as **Happiness** and **Radness**, tend to align with better sleep quality and higher productivity scores, indicating a positive feedback loop between mood and overall functioning.



How energy level affects productivity?

When energy levels are low, productivity tends to suffer. When the person experiences low energy, they may struggle to focus or engage fully in tasks, leading to decreased productivity. Conversely, higher energy levels (7-10) contribute to enhanced motivation, focus, and efficiency, resulting in heightened productivity levels.



References:

Github Repository –

https://github.com/akankshasingh200110/MoodScriber-Data-Challenge

Google Drive-

https://drive.google.com/drive/folders/1CJ9dx1aJRoJfRUP9YLNQSrqGrroooiO5?usp=sharing