practicum_1 Narges Yarahmadi Gharaei

B00941375

2. Can you think of 3 hypotheses for why someone may be more likely to miss a medical appointment?

Based on the fields provided in the dataset, here are three reasons why someone may be more likely to miss a medical appointment:

- 1. Lack of Reminder: If the "SMSReceived" field indicates that no reminder text was sent before the appointment, it could lead to a higher likelihood of missed appointments. Reminder texts can serve as helpful prompts for patients to remember their scheduled appointments. Without such reminders, patients may simply forget about their appointments.
- 2. Health Conditions: Patients with certain health conditions, such as "Hypertension," "Diabetes," or "AlcoholUseDisorder," may have a higher likelihood of missing appointments. These conditions can impact a person's overall health and well-being, potentially leading to a higher risk of forgetfulness, lack of motivation, or difficulties in adhering to appointments.
- 3. Disability Severity: The "Disability" field, which rates the severity of a patient's disability on a scale of 0-4, could also be a contributing factor to missed appointments. Patients with higher disability severity levels may face physical or logistical challenges that make it harder for them to attend appointments, resulting in a higher likelihood of non-attendance.

These reasons are derived from the specific fields provided in the dataset and provide potential insights into why someone may be more likely to miss a medical

appointment. However, it's important to perform data analysis and further exploration to confirm these hypotheses and potentially uncover additional factors that influence appointment attendance.

16. Based on the EDA, how well do you think this is going to work?

After examining the correlation heatmap and analyzing the relationship between the "NoShow" column and other variables, I discovered that the most relevant correlation exists with the "SMSReceived" field, with a correlation coefficient of 0.13. However, this value is relatively low, indicating that it may not significantly contribute to establishing a meaningful connection between the data and the label.

Considering this, I hold a pessimistic view regarding the predictor model's ability to construct a successful model that effectively addresses the problem at hand.