The dataset contains the following columns:

1. Name: Patient's name

2. Age: Patient's age

3. Gender: Patient's gender

4. Blood Type: Patient's blood type

5. Medical Condition: Condition diagnosed

6. **Date of Admission**: Admission date to the hospital

7. **Doctor**: Treating doctor's name

8. **Hospital**: Name of the hospital

9. Insurance Provider: Insurance provider's name

10. Billing Amount: Total billing amount

11. Room Number: Assigned room number

12. **Admission Type**: Type of admission (Urgent, Elective, Emergency, etc.)

13. Discharge Date: Date of discharge

14. **Medication**: Prescribed medication

15. Test Results: Results of diagnostic tests

## **Suggested Correlations & Data Visualizations**

Based on the dataset headers, here are some potential correlations and suggested visualizations:

### 1. Age vs. Billing Amount:

- Hypothesis: Older patients might incur higher billing amounts due to more complex medical conditions.
- Visualization: Scatter plot or Box plot.

### 2. Medical Condition vs. Billing Amount:

- Hypothesis: Certain medical conditions (e.g., cancer) might lead to higher costs.
- Visualization: Bar chart or Box plot.

## 3. Insurance Provider vs. Billing Amount:

- Hypothesis: Different insurance providers might be associated with varying billing amounts.
- Visualization: Bar chart.

# 4. Admission Type vs. Test Results:

- Hypothesis: Emergency admissions might result in more abnormal test results.
- Visualization: Stacked bar chart.

#### 5. Gender vs. Medical Condition:

- Hypothesis: Certain medical conditions might show gender-specific trends.
- o Visualization: Heatmap or Grouped bar chart.

# 6. Admission Duration (Discharge Date - Admission Date) vs. Billing Amount:

- o Hypothesis: Longer hospital stays might lead to higher bills.
- o Visualization: Line plot or Scatter plot.

## 7. Blood Type vs. Test Results:

- Hypothesis: Specific blood types might correlate with certain test outcomes.
- Visualization: Bar chart or Pie chart.

Would you like to explore specific correlations or create visualizations for some of these pairs?