### **Step 1: Connect to Your Data Source**

1. **Log in to Power BI**: Open Power BI and log in with your credentials.
2. **Import Data**: Click on the "Get Data" button and select your data source (e.g., Excel, SQL Database).

### **Step 2: Load and Transform Your Data**

1. **Upload Dataset**: Browse and upload your flight delay dataset.
2. **Transform Data**: Use Power Query Editor to clean and transform your data. Ensure columns such as Flight ID, Delay Status, Delay Reason, Arrival Time, Departure Time, Airline, and Airport are properly formatted.
3. Add conditional column delay and delay reason.

### **Step 3: Create Calculated Fields and Measures**

Count of Delay = COUNTROWS(FILTER(flight2,flight2[Delay]=="YES"))

Count of No Delay = COUNTROWS(FILTER(flight2,flight2[Delay]=="NO"))

### **Step 4: Build Visualizations**

* **Count of Flights by Delay Reason**:
  + Create a pie chart.
  + Use Delay Reason as the legend and Count of Flights as the values.
* **Sum of Total Delayed Time by Delay Reason**:
  + Create a pie chart.
  + Use Delay Reason as the legend and Sum of Delayed Time as the values.
* **Count of Flights by Delay Status**:
  + Create a donut chart.
  + Use Delay Status as the legend and Count of Flights as the values.
* **Count of Delay and No Delay by Time**:
  + Create an area chart.
  + Use Time on the X-axis, Count of Delay and Count of No Delay on the Y-axis.
* **Count of Flights by Arrival Time**:
  + Create a line chart.
  + Use Arrival Time on the X-axis and Count of Flights on the Y-axis.
* **Count of Flights by Departure Time**:
  + Create a line chart.
  + Use Departure Time on the X-axis and Count of Flights on the Y-axis.
* **Count of Flight Numbers by Airline**:
  + Create a bar chart.
  + Use Airline on the X-axis and Count of Flight Numbers on the Y-axis.
* **Table of Airports**:
  + Create a table visual.
  + Use Airport and Count of Flights.
* **Month Filter**:
  + Add a slicer for Month.
  + Set the default value to January.
* **Day Filter**:
  + Add a slicer for Day.
  + Set the default value to All.

### **Step 5: Combine the Visualization:**

1. **Arrange Visuals**: Drag and drop your visuals onto the Power BI report canvas to create a cohesive layout.
2. **Customize Visuals**: Adjust colors, labels, and formats to make the visuals clear and informative.