LAB:

Business Intelligence Tools for Visualization and Reporting

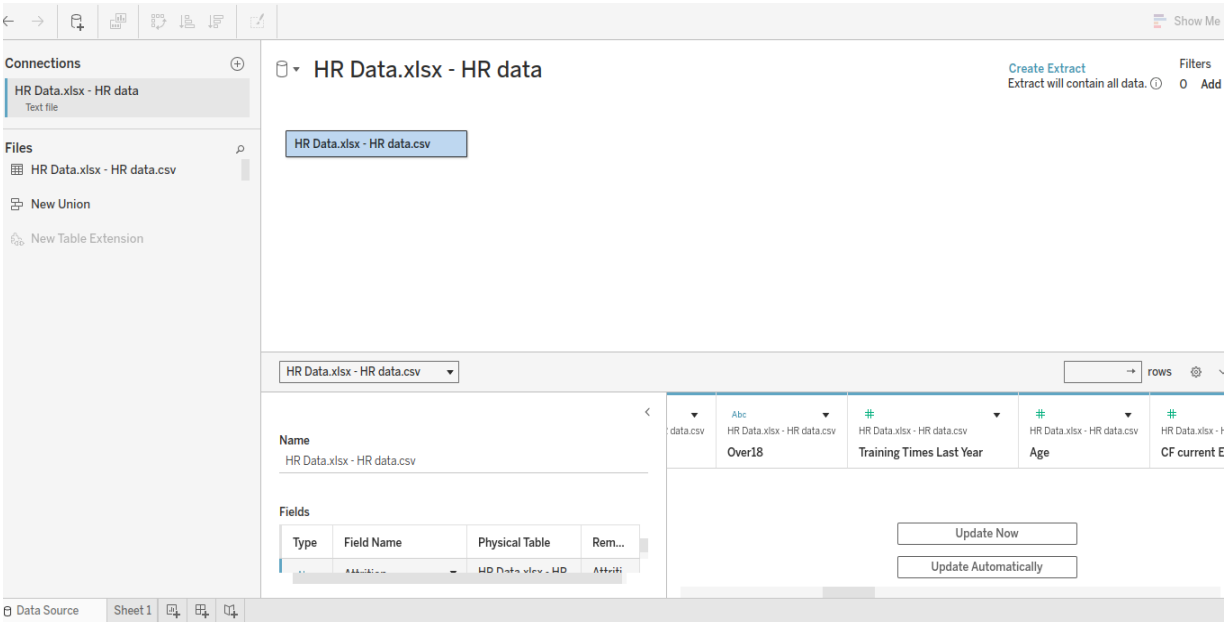
AIM: To perform Data Analysis Using TABLEAU. And to learn Business Intelligence Tools.

Tableau:

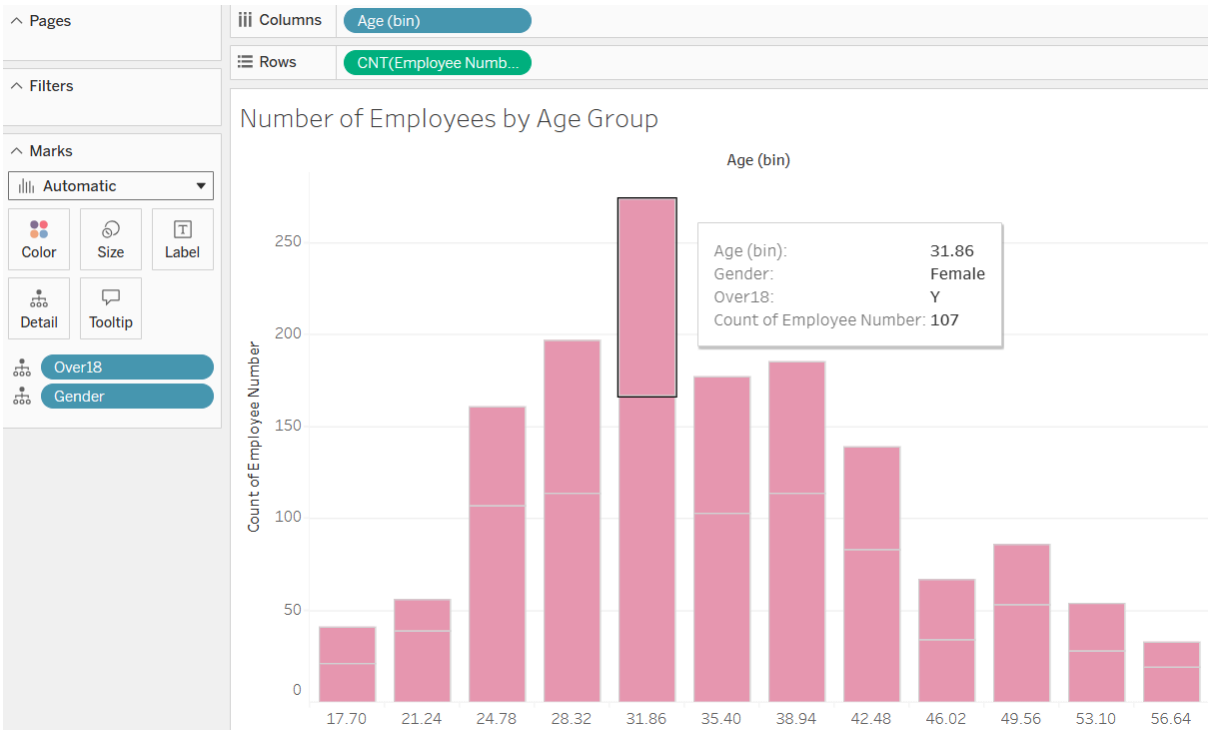
Tableau is a powerful data visualization tool that helps you connect to data, clean it, and create interactive charts, dashboards, and reports—all without writing code. It's widely used for data analysis and business intelligence.

Exercise: From Given Dataset "HR Data.xlsx - HR data.csv"

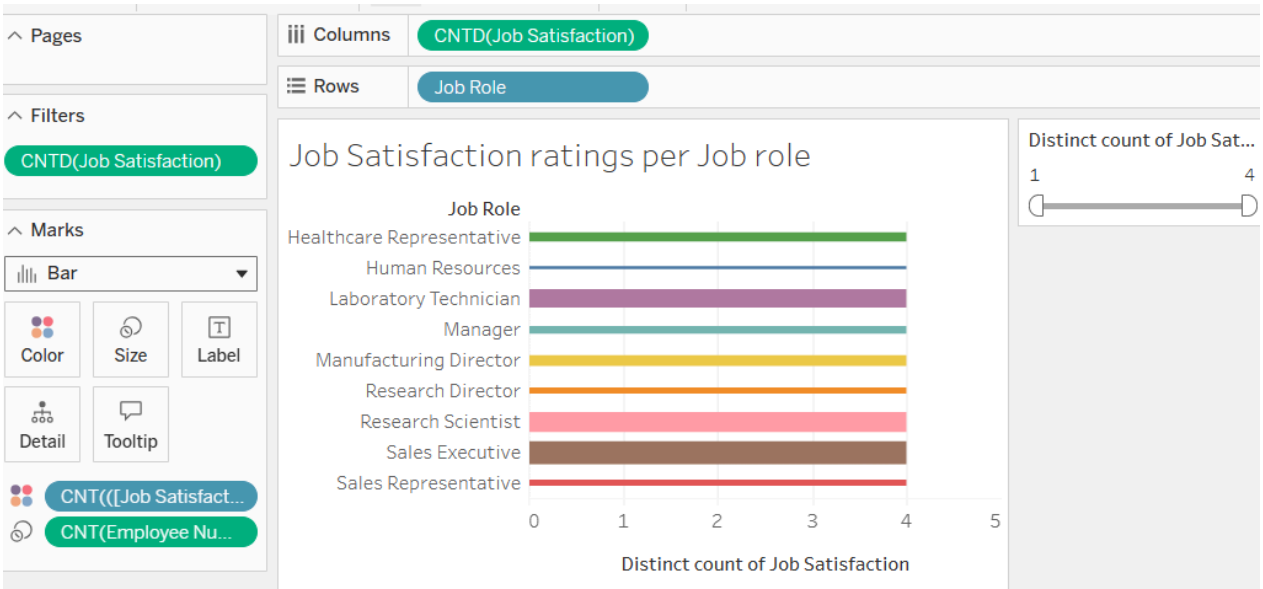
Tableau Dashboard after uploading the dataset:



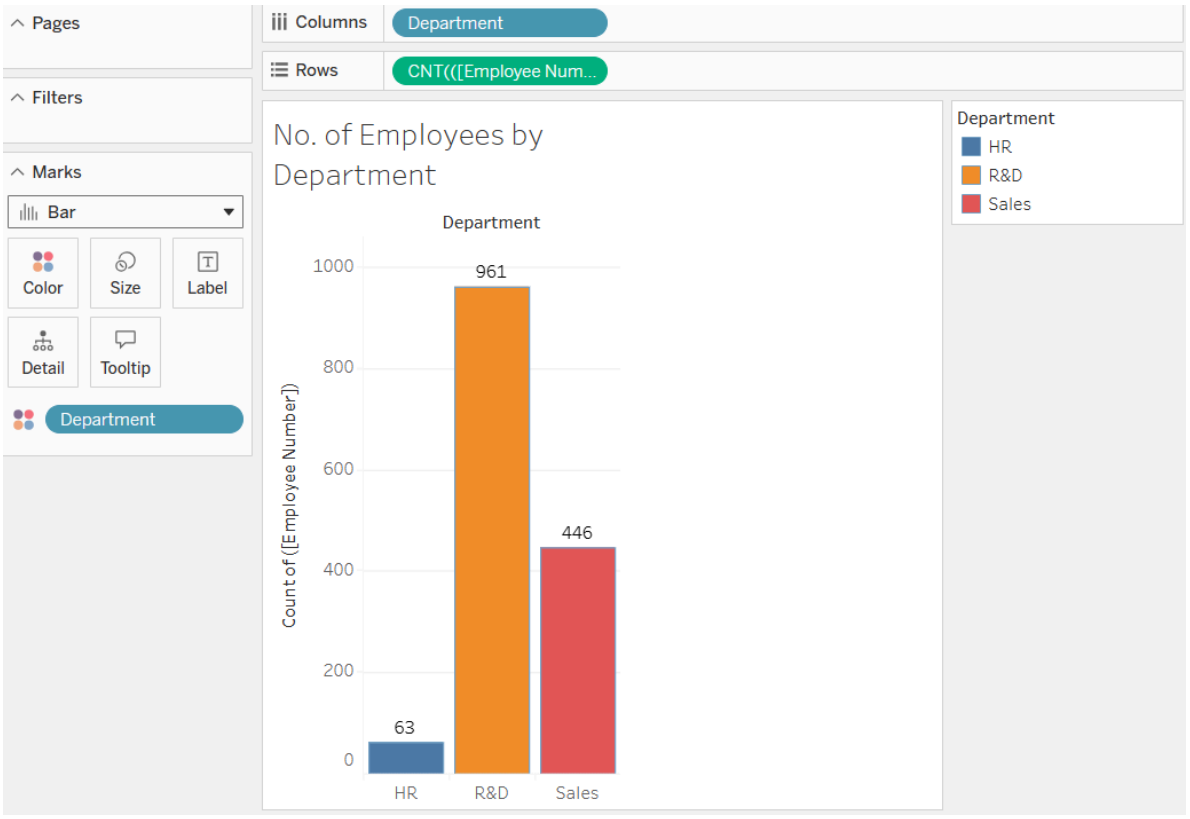
1. Visualize the number of employees by their age group.



2. Visualize Job Satisfaction rate of each job role and count the total number of employees satisfied with each rating (example; how many employees given the rating as 1, how many of them given the rating as 2, 3, and 4).

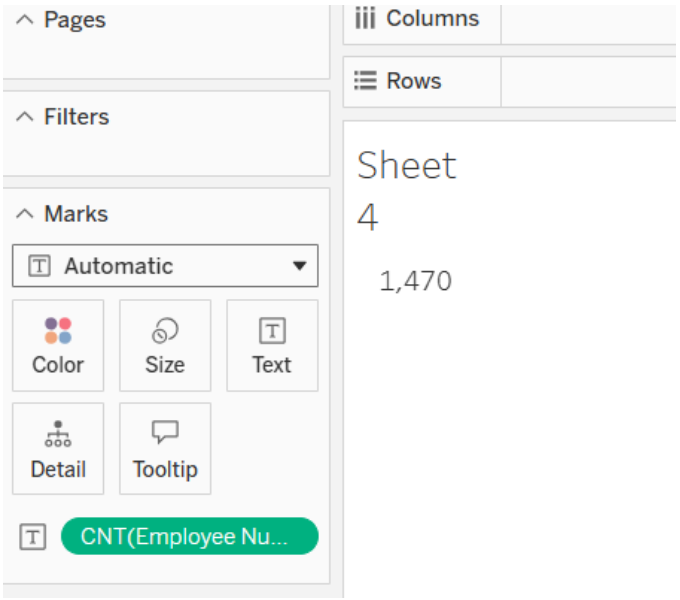


3. Visualize how many employees are there in each department.

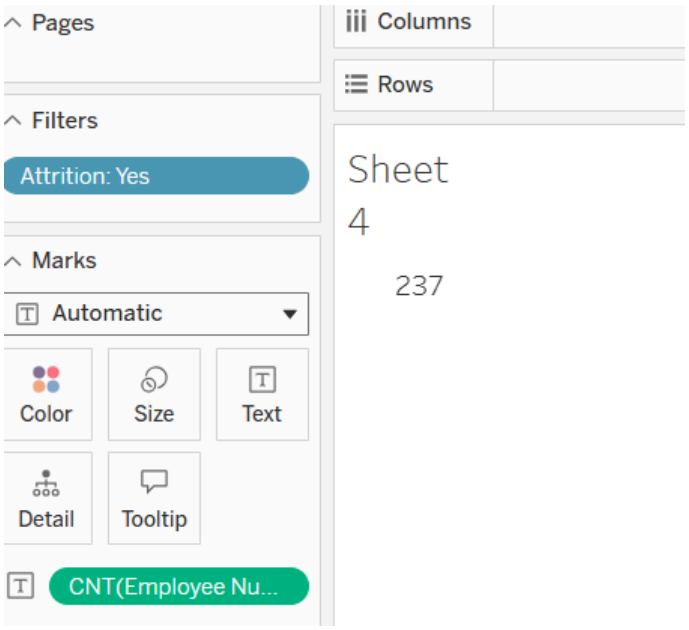


4. Calculate the following: Employee count, Attrition count, active employees, average age.

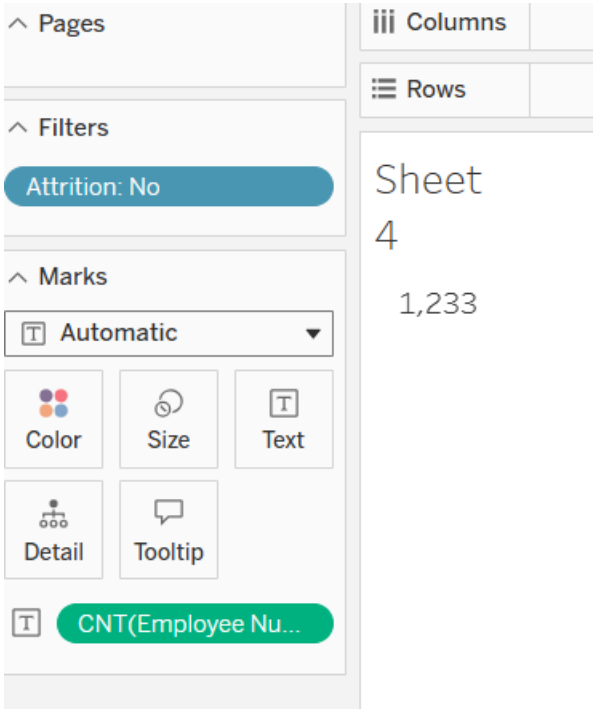
Employee count



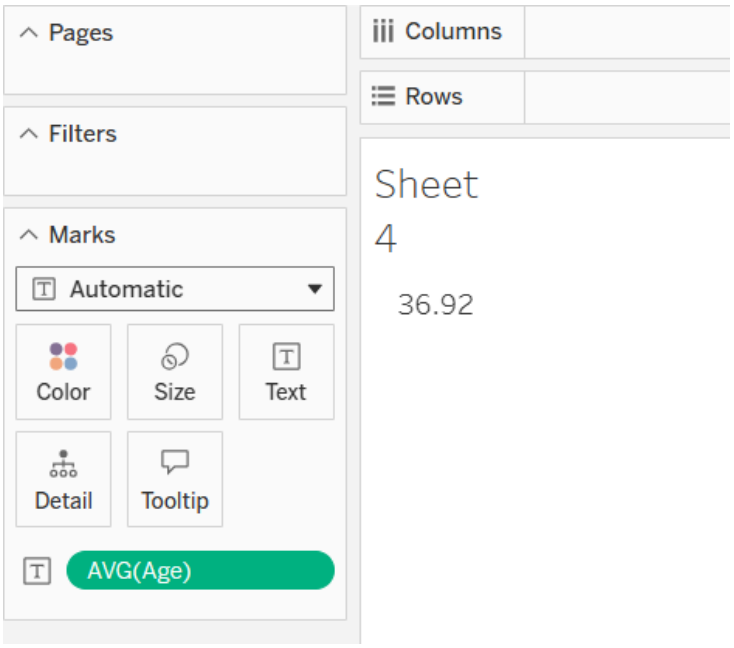
Attrition count



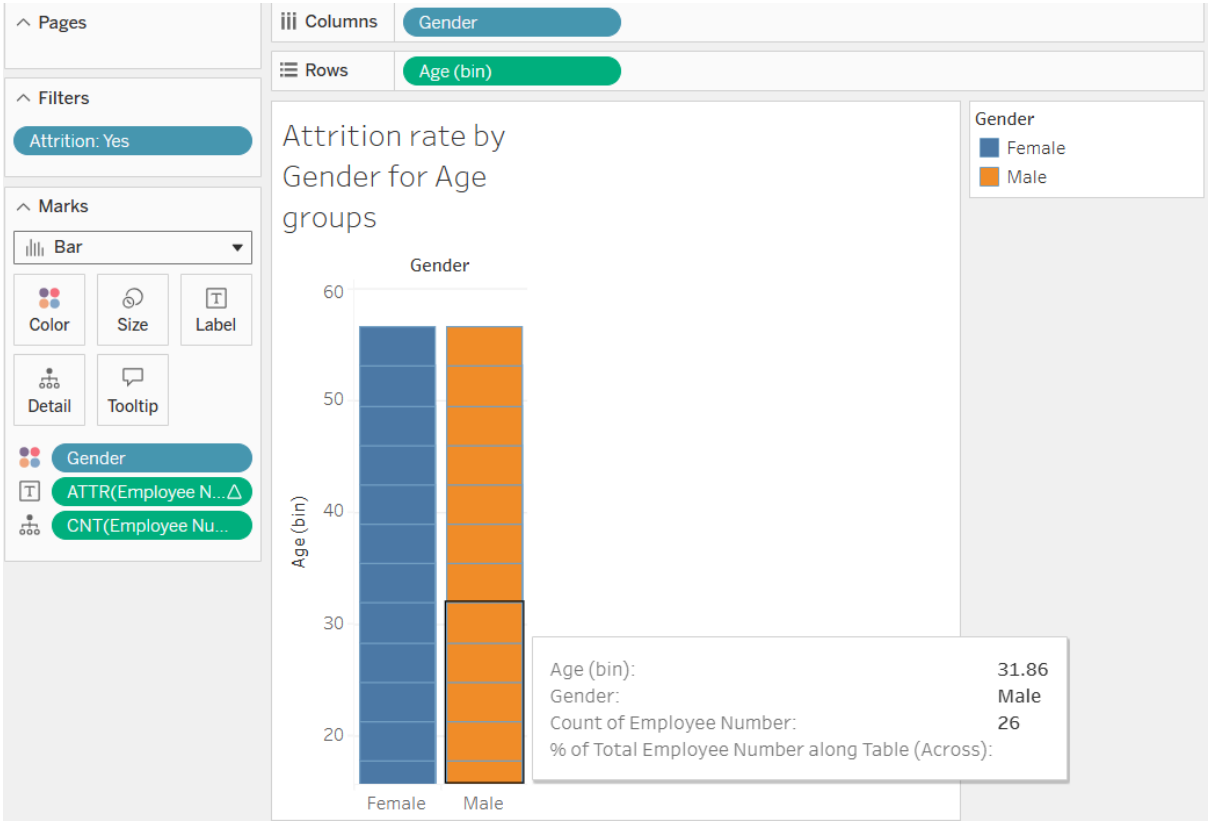
Active employees



Average age



5. Visualize attrition rate by gender for different age groups.



Summarised learning:

In this lab, I explored data analysis using ***Tableau Public,*** focusing on employee-related insights. I learned how to connect and clean data, create age bins, and visualize patterns such as employee distribution by age group, job satisfaction by role, department-wise employee counts, and attrition analysis by gender and age group. Additionally, I calculated key metrics like employee count, attrition count, active employees, and average age. This exercise helped me understand how to build interactive dashboards and draw meaningful insights through visual analytics.