Program 11. Analysis of HR Dataset:

i)Create KPI to show employee count, attrition count, attrition rate, attrition count, active employees, and average age.

ii) Create a Lollipop Chart to show the attrition rate based on gender category.

iii) Create a pie chart to show the attrition percentage based on Department Category- Drag department into colours and change automatic to pie. Entire view, Drag attrition count to angle. Label attrition count, change to percent, add total also, edit label.

iv) Create a bar chart to display the number of employees by Age group,

v) Create a highlight table to show the Job Satisfaction Rating for each job role based on employee count.

vi) Create a horizontal bar chart to show the attrition count for each Education field Education field wise attrition – drag education field to rows, sum attrition count to col,

vii) Create multiple donut chart to show the Attrition Rate by Gender for different Age group.

Solution :

i) Create KPI to show employee count, attrition count, attrition rate, attrition count, active employees, and average age.

Step1: Create a New measure

Employee Count = COUNT('HR'[EmployeeNumber])

Step2: Choose KPI card in the visualization and drag and drop the Employee Count. Format your visuals of your style.

Employee Count

1470

Step3: Create a New Measure

Attrition Count = COUNTROWS(FILTER('HR', 'HR'[Attrition]="Yes"))

Step4: Choose KPI card in the visualization and drag and drop the Attrition Count. Format your visuals of your style.

Attrition Count

237

Step5: Create a New Measure

Attrition Rate = DIVIDE([Attrition Count], [Employee Count], 0) * 100

Step6: Choose KPI card in the visualization and drag and drop the Attrition Rate. Format your visuals of your style.

Attrition Rate
16.12

Step7: To find active employees create a new measure

Active Employees = [Employee Count] - [Attrition Count]

Step8: Choose KPI card in the visualization and drag and drop the Active Employees. Format your visuals of your style.

Active Employees
1233

**Step9:** To calculate average age create a new measure

 Average Age = AVERAGE(HR[Age])

Step10: Choose KPI card in the visualization and drag and drop the Average Age. Format your visuals of your style.

Average Age
36.92

ii) Create a Lollipop Chart to show the attrition rate based on gender category.

Power BI does not have a native Lollipop Chart, so you will simulate it using (any chart) a **Line and Stacked column Chart**
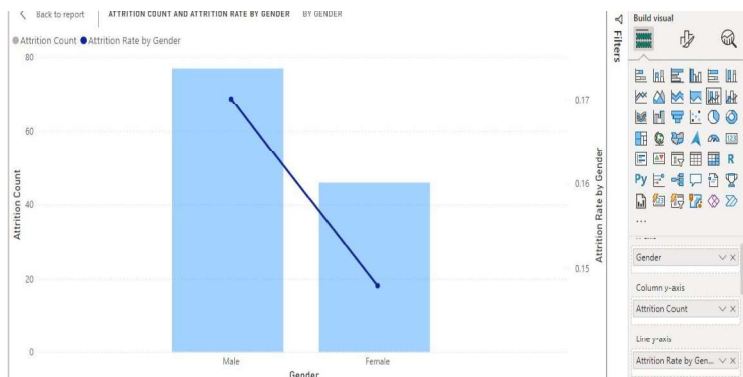
iii) Create a pie chart to show the attrition percentage based on Department Category-

Drag department into colours and change automatic to pie. Entire view, Drag attrition count to angle. Label attrition count,change to percent, add total also, edit label.

- From the **Visualizations** pane on the right, select the **Pie Chart** visual icon. This will add a blank pie chart to your report canvas.

Set Up the Pie Chart:

- **Drag the Department Field** to the **Legend** area.

- **Drag the Attrition Count Measure** to the **Values** area.

Configure Data Labels and Formatting:

- Click on the **Pie Chart** to select it.

- Open the **Format Pane** (paint roller icon).

Change Data Label Settings:

- **Go to the Data Labels section** in the Format pane.

- Toggle **Data Labels** to **On**.

- In the **Data Label settings**, change **Label Style** to **Percent**. This will show the percentage of each department's attrition relative to the total.

- To show the **Total** alongside the percentages:

- Ensure that **Data Labels** are visible and set to **Show**.

- You can add a **Total Label** in the **Title** or **Tooltips** sections if needed for additional context.

Format the Pie Chart:

- **Adjust Colors:**

  - Go to the **Data Colors** section in the Format pane.

  - You can customize colors for each department by clicking on the color next to the department name and choosing the color you prefer.

- **Edit Labels:**

  - If you want to customize the text in the labels, you can use the **Data Label** formatting options to adjust font size, color, and display units.
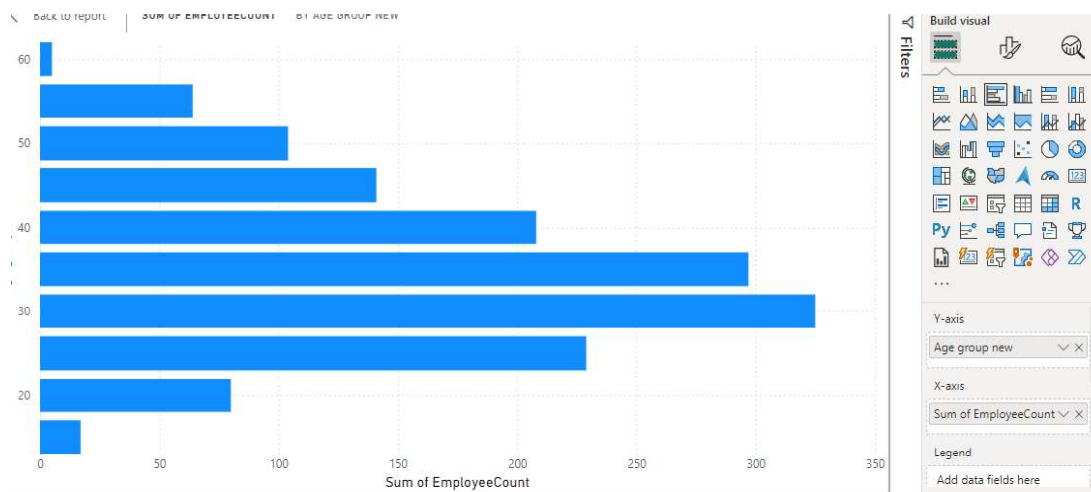
Finalize Your Visualization:

  - Ensure your pie chart looks as expected with percentages representing the attrition rate for eachdepartment.
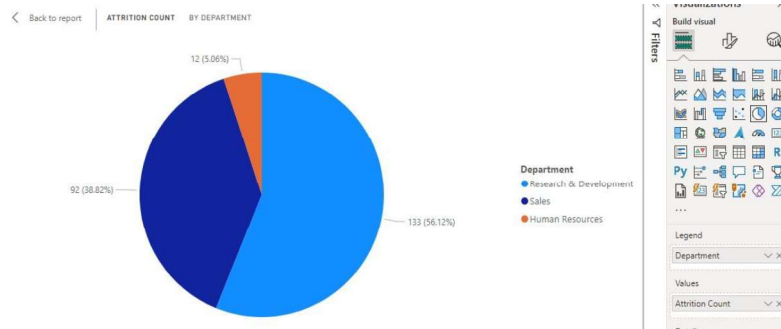
iv) Create a bar chart to display the number of employees by Age group,

 Step1: right click Age and choose new group and set bin size as 5.

 Step2: Choose any bar chart drag and drop new age bin and employee count.

 V) Create a highlight table to show the Job Satisfaction Rating for each job role based on employeecount.
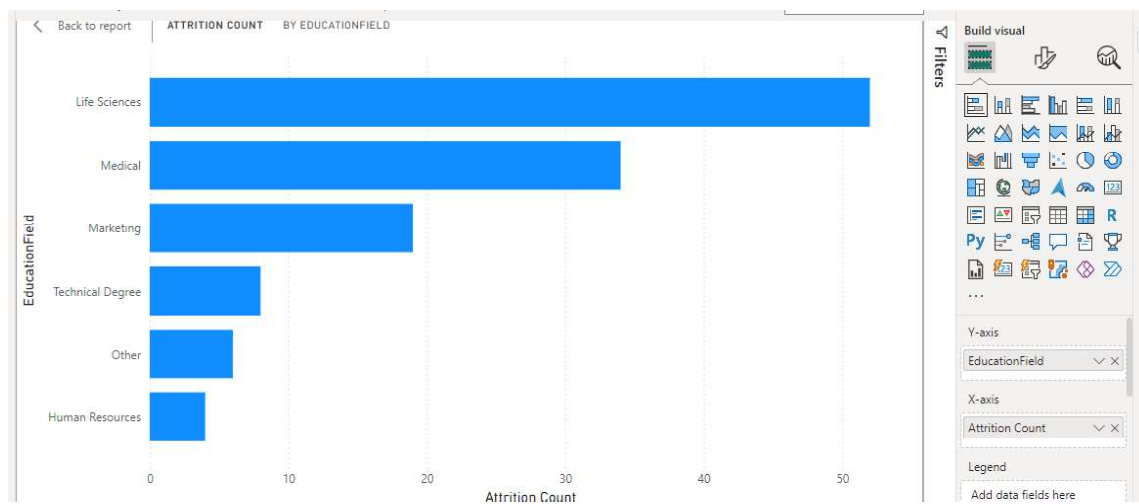
- Create a **Matrix** visual from the Visualizations pane.

- Drag the Job Role field to **Rows**.

- Drag the Job Satisfaction Rating field to **Columns**.

- Drag the Employee Count measure to **Values**.

VI) Create a horizontal bar chart to show the attrition count for each Education field Educationfield wise

Attrition – drag education field to rows, sum attrition count to col,

Step1: Horizontal bar chart It's called the **Clustered Bar Chart** or **Stacked Bar Chart** in the visualizationpane

Choose stacked bar chart and set y axis is education filed and x axis is attrition count.


vii) **Create multiple donut chart to show the Attrition Rate by Gender for different Age group.Choose donut chart and drag and drop legend as gender and value as attrition rate.**

1. Select the **Donut Chart** from the Visualizations pane.

2. Create separate **Donut Charts** for different age groups.

   For each chart, filter the dataset based on age group (using the Age Group field created earlier).

3. Drag the Gender field to **Legend**.

4. Drag the Attrition Rate measure to **Values**.

5. Repeat for each age group, ensuring each donut chart represents a different age group with gender breakdown.

Note:

- Use **Filters** to dynamically adjust visuals where necessary (e.g., filter by Age Group or EducationField).
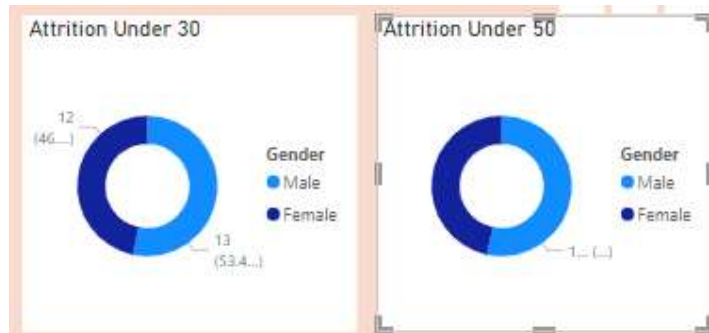
P r o g r a m 1 2 : **Analysis of Amazon Prime Dataset:**

i) Create a Donut chart to show the percentage of movie and tv shows

ii) Create a area chart to shows by release year and type

iii) Create a horizontal bar chart to show Top 10 genre

iv) Create a map to display total shows by country

v) Create a text sheet to show the description of any movie/movies.

vi) Build an interactive Dashboard.

Step1: Upload the Amazon CSV dataset.