Final Task: HR Analytics Dashboard Development

Task Overview:

This project focuses on building an HR analytics dashboard in Power BI, integrating SQL data on employee performance, satisfaction, and demographics. The dashboard will provide HR teams with actionable insights for improving organizational performance and decision-making.

Objective:

Develop an interactive Power BI dashboard using SQL-based HR data to provide insights into employee performance, satisfaction, and demographics, enabling data-driven decision-making for HR teams.

Task Breakdown:

Step 1: Data Preparation

- **Import & Normalize Data**: Import the HR dataset into SQL, normalize it by creating dimension tables (employee, education, satisfaction, rating) and a fact table (performance ratings).
- **Data Transformation**: Clean the data using SQL queries, handling missing values and ensuring consistency across the tables.

Step 2: Power BI Integration

- **Data Import**: Import the cleaned SQL data into Power BI.
- **Relationships**: Build relationships between the dimension tables and the fact table (e.g., employee ID, department, satisfaction).

Step 3: Dashboard Development

Create a **4-page Power BI Dashboard**:

1. **Page 1: Overview & Employee Metrics**
   Visuals: KPI cards (total employees, performance average), bar charts (performance by department), pie chart (satisfaction levels), stacked columns (gender by department).

2. **Page 2: Performance & Satisfaction Analysis**
   Visuals: Bar charts (performance by job role), scatter plot (work-life balance vs satisfaction), matrix (satisfaction by role), heat map (satisfaction by demographics).

3. **Page 3: Demographics & Trends**
   Visuals: Histograms (age distribution), line chart (performance trends), treemap (role distribution by satisfaction), slicers for filtering data.

4. **Page 4: Insights & Reporting**
   Visuals: KPI cards (top departments by satisfaction), pie chart (attrition by department), bar chart (satisfaction by age), detailed comparison table.

Step 4: Interactivity & Filters

- **Slicers & Filters**: Add dynamic slicers for filtering by department, role, satisfaction, age, and gender.
- **Interactivity**: Enable drill-through, drill-down features, and dynamic titles to enhance user experience.

Step 5: Insights & Interpretation

- **Actionable Insights**: Summarize key findings like high-performing departments, satisfaction trends, and retention factors.
- **Report**: Document SQL queries, Power BI setup, and key insights for HR decision-making.

Step 6: Final Review & Presentation

- **Visual Design**: Ensure clarity and consistency across visuals.
- **Sharing**: Save and share the Power BI report (.pbix) and a detailed summary report.

The End