1. Problem Statement

Employee attrition is a critical challenge for organizations as it affects productivity, morale, and financial costs. The primary aim of this analysis is to understand employee attrition trends, identify key factors contributing to it, and provide actionable insights to reduce attrition rates. This includes investigating variables such as age groups, satisfaction levels, monthly working hours, and department-specific attrition trends.

2. Data Requirements

To address the problem effectively, the following data elements are required:

1. **Employee Demographics**:

   o Age

   o Gender

2. **Work-Related Data**:

   o Department (e.g., Sales, Finance, HR, etc.)

   o Monthly working hours

   o Salary levels

   o Years at the company

3. **Attrition Metrics**:

   o Attrition status (binary: 1 for left, 0 for stayed)

   o Satisfaction levels (quantitative scale or categorical)

4. **Aggregated Insights**:

   o Average age of employees

   o Total employees and total attrition count

3. Data Collection Process

The data collection process should follow these steps:

1. **Employee Records Database**:
   Gather data from the organization's HR Management System (HRMS) to obtain employee demographics, work-related data, and attrition status.

2. **Satisfaction Surveys**:
   Extract satisfaction level data from regular employee engagement surveys conducted by the organization.

3. **Performance and Payroll Systems**:
   Collect monthly working hours and salary data from performance tracking tools and payroll systems.

4. **Data Integration**:

   o Consolidate all datasets into a single repository using a unique Employee ID as the primary key.

   o Ensure the data is cleaned, anonymized, and free of inconsistencies to protect employee confidentiality.

5. **Validation and Enrichment**:

   o Cross-validate the data with departmental reports to ensure accuracy.

   o Enrich datasets with additional features if necessary, such as performance ratings or external benchmarks.