

## Employee Data Analysis - Documentation

### 1. Data Validation

Data validation has been applied to ensure accurate and consistent data entry. The following validation rules are used:

- **Dropdown Lists:**
  - Department (HR, IT, Finance, Admin, etc.)
  - Status (Active, Inactive)
- **Restrictions:**
  - Salary must be numeric and greater than 0.
  - Email must follow a valid format (e.g., [example@example.com](mailto:example@example.com)).
  - Date of Joining cannot be in the future.

### 2. Data Filtering

Filtering is applied to specific columns to allow easy sorting and searching of records. Users can filter by:

- Date of Joining (filter employees who joined after a specific year)

### 3. Pivot Tables

Pivot tables are used to summarize key insights:

- **Located in the "Summary" sheet.**
- One pivot table groups employees by **Department** to show employee distribution.
- Another pivot table groups employees by **Year of Joining** to analyze hiring trends.

### 4. Charts and Visualizations

Several charts are included to visually represent data trends:

- A **summary report** chart displaying the number of employees per department.
- A **yearly hiring trend** chart showing the number of employees hired per year.

### 5. Applied Formulas

The following formulas are used for calculations:

- **IF Statement:** Used to classify employees based on salary.

- Example: =IF(F2>5000, "Senior", "Junior") categorizes employees based on salary.
- **VLOOKUP:** Used to pull department-specific rules from another sheet.
  - Example: =VLOOKUP(C2,'Department Rules'!A:B, 2, FALSE)

## 6. Conditional Formatting

Conditional formatting is applied to highlight key data points:

- Employees earning **below \$3,000** are highlighted in red.
- Employees who joined in the **last 6 months** are highlighted in green.

## 7. Dropdown Lists

Dropdown lists are implemented in the following columns:

- **Department** (HR, IT, Finance, etc.)
- **Status** (Active, Inactive)