# Tasks\_19.09\_Mathplotlib

# **Matplotlib Visualization Tasks**

## Task 1: Bar Plot - Average Salary by Department

Objective: Create a bar plot to visualize the average salary for each department.

## Task 2: Scatter Plot - Salary vs Performance Rating

**Objective:** Generate a scatter plot to visualize the relationship between salary and performance rating.

## Task 3: Box Plot - Salary Distribution by Department

Objective: Create a box plot to show the distribution of salaries across different departments.

#### Task 4: Count Plot - Number of Employees by Department

**Objective:** Generate a count plot to display the number of employees in each department.

#### **Task 5: Line Plot - Salary Over Time (Start Dates)**

Objective: Create a line plot to show how salaries change over time based on start dates.

#### **Task 6: Heatmap - Correlation Matrix**

**Objective:** Create a heatmap to visualize the correlation between numerical features in the dataset.

#### Task 7: Violin Plot - Salary Distribution by Department

Objective: Create a violin plot to visualize the distribution of salaries for each department.

#### Task 8: Pair Plot - Relationships Between Numerical Features

**Objective:** Generate a pair plot to visualize pairwise relationships between numerical features.

# Task 9: Histogram - Salary Distribution

**Objective:** Create a histogram to display the distribution of salaries across all employees.

# Task 10: SubPlot - Performance Rating by Project

**Objective:** Use a SubPlot to create scatter plots showing the relationship between salary and performance rating for each project.

## Task 11: Strip Plot - Performance Rating by Role

**Objective:** Create a strip plot to show performance ratings for each role.