Data Loading and Overview

1. Read a CSV file into a Pandas DataFrame
➤ Load data.csv and display the first 5 rows.

2. Check the shape of a DataFrame
➤ How many rows and columns are present?

3. Get summary statistics
➤ Use a method to get min, max, mean, etc., for numeric columns.

Data Selection and Filtering

4. Select a single column
➤ Extract the "Age" column as a Series.

5. Filter rows based on condition
➤ Show rows where "Salary" > 50000.

6. Filter multiple conditions
➤ Display rows where "Department" == 'HR' and "Age" > 30.

Data Cleaning

7. Check for missing values
➤ Find which columns have NaN values and how many.

8. Replace missing values
➤ Fill NaN values in "Salary" with 0.

9. Remove duplicate rows
➤ Drop duplicates and reset the index.

Data Aggregation and Sorting

10. Sort the DataFrame by a column
➤ Sort rows by "Age" in descending order.

11. Group by and aggregate
➤ Group by "Department" and find the average "Salary".

12. Count unique values
➤ How many unique departments are there in the "Department" column?