Python List - Case Studies: Questions Only

Case Study 1: Grocery Basket Manager

Scenario: You are building a small app for a grocery store. The store owner wants to manage a list of items being added to a customer's basket.

- 1. Create an empty list for the basket.
- 2. Add items to the basket using append().
- 3. Display the list after each addition.
- 4. If a user wants to remove an item, remove it using remove().
- 5. Display the final list.

Case Study 2: Top 5 Marks Analyzer

Scenario: A school wants to analyze the top 5 scores of students in a test.

- 1. Take 5 marks as input.
- 2. Store in list, sort it.
- 3. Find max, min and average.

Case Study 3: Movie Watchlist App

Scenario: Build a movie app where users store and update their favorite movies.

- 1. Create a movie list.
- 2. Add or replace a movie.
- 3. Show final list.

Case Study 4: Cricket Team Manager

Scenario: Manage 11-player cricket team.

- 1. Remove injured player.
- 2. Add substitute.
- 3. Show final team.

Case Study 5: Duplicate Remover

Scenario: Clean duplicate entries from a list.

- 1. Input list with duplicates.
- 2. Remove duplicates (without set).

Case Study 6: Reverse Playlist

Scenario: User wants songs in reverse order.

- 1. Input 5 songs.
- 2. Display in reverse.

Case Study 7: Search and Count

Scenario: Search how many times a word appears.

- 1. Input list of words.
- 2. Count occurrences.

Case Study 8: Student Roll Call

Scenario: Maintain attendance.

- 1. Add student names.
- 2. Remove absentees.
- 3. Print present list.

Case Study 9: Favorite Colors Editor

Scenario: Edit favorite color list.

- 1. Input colors.
- 2. Replace and delete colors.

Case Study 10: Shopping List Sorter

Scenario: User wants sorted shopping list.

- 1. Take 5 items.
- 2. Sort alphabetically.