# Module 9.4 Class - Methods: Coding Questions

## Question 1: Implement a class for a shopping cart where you can add items, remove items, and calculate the total cost.

Hint: Include methods for adding, removing items, and calculating total. Use a dictionary to store items and their prices.

## Question 2: Create a class for managing a digital library. Methods should include adding a book, removing a book, and listing all books.

Hint: Use a list to store book titles. Include checks in your methods for when a book isn't found.

## Question 3: Design a class representing a calculator. Include methods for basic operations: add, subtract, multiply, and divide.

Hint: Think about how each method will accept numbers as arguments and return the result of the operation.

## Question 4: Write a class for a user profile in an application. Include methods to update user information and display the profile.

Hint: Store user information as attributes. Methods should modify these attributes or print them.

## Question 5: Develop a class for a game character with methods to modify the character's stats (health, strength, agility).

Hint: Include methods to increase or decrease stats. Ensure stats do not go below 0.

## Question 6: Implement a class for a simple email system with methods to compose, send, and delete emails.

Hint: Use lists to store emails. Sending an email can move it from a draft list to a sent list.

## Question 7: Create a class for a bank system with methods to create an account, deposit money, withdraw money, and check balance.

Hint: Use a dictionary to store account information. Include checks for valid deposit and withdrawal amounts.

## Question 8: Design a class for a temperature converter with methods to convert between Fahrenheit, Celsius, and Kelvin.

Hint: Include separate methods for each conversion. Use the appropriate formulas inside each method.

## Question 9: Write a class for managing tasks in a to-do list application. Include methods to add a task, complete a task, and display all tasks.

Hint: Tasks can be stored in a list. Completing a task could change its status or remove it from the list.

## Question 10: Develop a class for an online store's product with methods to apply discounts, restock products, and display product information.

Hint: Store product details as attributes. Methods should adjust these attributes accordingly.