# Module 9.2 Class - Self & Init: Coding Questions

## Question 1: Create a class for a bank account. Include methods for depositing, withdrawing, and displaying the account balance.

Hint: Use the \_\_init\_\_ method to initialize account balance. Ensure methods update or use the balance correctly with self.

## Question 2: Design a class to represent a product in an ecommerce platform. Include attributes like name, price, and inventory quantity.

Hint: Implement an \_\_init\_\_ method to set the initial values and a method to display product details.

## Question 3: Implement a class representing a Book. Include attributes for title, author, and pages and a method to display book info.

Hint: Use the \_\_init\_\_ method for setting attributes. Consider how each book's information can be uniquely displayed.

## Question 4: Develop a class for managing a to-do list. Include methods for adding a task, removing a task, and displaying all tasks.

Hint: Think about using a list to store tasks. Use self to refer to and modify the list within class methods.

## Question 5: Write a class for handling user profiles in a social media app, including user name, bio, and posts.

Hint: Consider methods for adding a post, deleting a post, and displaying user's profile information.

## Question 6: Create a class to represent a vehicle. Include attributes for make, model, and year, and a method to display its full description.

Hint: Your \_\_init\_\_ method should capture the make, model, and year. The display method should use these attributes.

## Question 7: Design a class for a simple inventory system. Include attributes for item names and quantities and methods to add or remove items.

Hint: Use a dictionary to keep track of item names and quantities. Ensure your methods adjust the inventory correctly.

## Question 8: Implement a class that represents a circle. Include an attribute for the radius and a method to calculate the area.

Hint: Remember the area of a circle is calculated as π \* radius^2. You may use math.pi for π.

## Question 9: Create a class for an email system. Include methods for composing, sending, and deleting emails.

Hint: Consider how you will store emails. Methods should update the store appropriately.

## Question 10: Write a class to manage a movie collection, including methods to add a movie, find a movie, and list all movies.

Hint: Use a list or a dictionary to store movies. Think about the attributes each movie should have.