Practice 1: Vehicle Class

Task:

1. Define a `Vehicle` class with attributes:
    - `make`
    - `model`
    - `year`
2. Add methods to:
    - Display the vehicle's details
3. Implement setters and getters for the attributes.
4. Validate that:
    - Make and model are non-empty strings.
    - Year is a positive integer.

Practice 2: Movie Class

Task:

1. Define a `Movie` class with attributes:
    - `title`
    - `director`
    - `duration` (in minutes)
2. Add methods to:
    - Display the movie's details
3. Implement setters and getters for the attributes.
4. Validate that:
    - Title and director are non-empty strings.
    - Duration is a positive integer.

Practice 3: Laptop Class

Task:

1. Define a `Laptop` class with attributes:
    - `brand`
    - `ram` (in GB)
    - `storage` (in GB)
2. Add methods to:
    - Display the laptop's specifications
3. Implement setters and getters for the attributes.
4. Validate that:
    - Brand is a non-empty string.
    - RAM and storage are positive integers.

Practice 4: City Class

Task:

1. Define a `City` class with attributes:

    - `name`
    - `population`
    - `area` (in square km)
2. Add methods to:
    - Display the city's details
3. Implement setters and getters for the attributes.
4. Validate that:
    - Name is a non-empty string.
    - Population and area are positive integers.

Practice 5: Restaurant Class

Task:

1. Define a `Restaurant` class with attributes:
    - `name`
    - `cuisine_type`
    - `rating` (out of 5)
2. Add methods to:
    - Display the restaurant's details
3. Implement setters and getters for the attributes.
4. Validate that:
    - Name and cuisine type are non-empty strings.
    - Rating is a float between 0 and 5.

Practice 6: Student Class

Task:

1. Define a `Student` class with attributes:
    - `first_name`
    - `last_name`
    - `grade` (as a percentage)
2. Add methods to:
    - Display the student's details
3. Implement setters and getters for the attributes.
4. Validate that:
    - First and last names are non-empty strings.
    - Grade is a float between 0 and 100.

Practice 7: GymMembership Class

Task:

1. Define a `GymMembership` class with attributes:
    - `member_name`
    - `membership_type` (e.g., Basic, Premium)
    - `expiration_date`
2. Add methods to:
    - Display the membership details
3. Implement setters and getters for the attributes.

4. Validate that:
    - Member name is a non-empty string.
    - Membership type is either 'Basic' or 'Premium'.
    - Expiration date is a valid date string.

Practice 8: Bookstore Class

Task:

1. Define a `Bookstore` class with attributes:
    - `store_name`
    - `location`
    - `num_books`
2. Add methods to:
    - Display the bookstore's details
3. Implement setters and getters for the attributes.
4. Validate that:
    - Store name and location are non-empty strings.
    - Number of books is a positive integer.

Practice 9: Smartphone Class

Task:

1. Define a `Smartphone` class with attributes:
    - `brand`
    - `model`
    - `battery_life` (in hours)
2. Add methods to:
    - Display the smartphone's specifications
3. Implement setters and getters for the attributes.
4. Validate that:
    - Brand and model are non-empty strings.
    - Battery life is a positive integer.

Practice 10: MusicAlbum Class

Task:

1. Define a `MusicAlbum` class with attributes:
    - `album_name`
    - `artist`
    - `release_year`
2. Add methods to:
    - Display the album's details
3. Implement setters and getters for the attributes.
4. Validate that:
    - Album name and artist are non-empty strings.
    - Release year is a positive integer.