

Lab 03 Tasks

- Task 1:** Saad, a businessman in Faisalabad, often forgets how much cash he has in his wallet. To keep track of his expenses, he needs a digital system that can monitor his balance, record transactions, and notify him when he is low on cash. Create a **Wallet** class with attributes like **ownerName**, **totalBalance**, and **transactionHistory**. Implement methods to add money, spend money, and display transaction history. Help Saad manage his finances efficiently!
- Task 2:** Laiba, a fitness enthusiast from Islamabad, wants to track her daily steps and calories burned. She needs a program that records her daily progress and provides feedback. Create a **FitnessTracker** class with attributes like **userName**, **dailyStepGoal**, **stepsTaken**, and **caloriesBurned**. Implement methods to log steps, calculate calories burned, and display progress. Ensure Laiba can check if she met her fitness goal for the day.
- Task 3:** Hamza, a librarian in Peshawar, finds it difficult to manage the list of books available in the library. He needs a system that can store book details, allow students to borrow books, and track book availability. Create a **Library** class with attributes like **bookList**, **borrowedBooks**, and **availableBooks**. Implement methods to add books, lend books to students, and return books. Help Hamza keep track of library inventory.
- Task 4:** Zoya, a working professional in Multan, drives to work daily and often forgets to check her fuel level. She needs a system that calculates fuel consumption and warns her when the fuel is low. Create a **Car** class with attributes like **brand**, **model**, **fuelCapacity**, and **currentFuelLevel**. Implement methods to drive the car (reducing fuel level), refuel the tank, and check fuel status. Help Zoya avoid running out of fuel unexpectedly.
- Task 5:** Imran, wants to create a digital music playlist manager where he can store, play, and remove songs. Create a **MusicPlayer** class with attributes like **playlist** (a list of songs) and **currentlyPlayingSong**. Implement methods to add songs, remove songs, play a song, and display the playlist. Help Imran create his own personal music collection!