Python_Activity15

Activity 1: Simple - Unit Converter (Kilometers to Miles) 🌍

📌 Objective:

This activity helps students practice defining and using functions by creating a simple unit converter that converts kilometers to miles.

✅ Instructions:

1. Create a function named `convert_km_to_miles(km)` that:
   - Accepts a distance in kilometers.
   - Converts it to miles using the formula: `1 km = 0.621371 miles`.
   - Returns the converted distance.
2. In the `main()` function:
   - Ask the user to input a distance in kilometers.
   - Call the `convert_km_to_miles()` function.
   - Display the converted result.
3. Include error handling so the program does not crash if the user enters invalid input.

Activity 2: Challenging - Library Management System 📚

📌 Objective:

This activity requires students to work with functions, dictionaries, and loops to simulate a library system where users can view available books, borrow books, and return books.

✅ Instructions:

1. Create a dictionary named `books` where:
   - The **keys** are book titles.
   - The **values** are `True` (available) or `False` (borrowed).
2. Implement the following functions:

- `view_books()` : Displays books that are available for borrowing.
- `borrow_book(title)` : Marks a book as borrowed if available.
- `return_book(title)` : Marks a borrowed book as available again.

3. In the `main()` function:
   - Create a loop with a **menu system** that allows the user to choose options:
     - `1` → View available books.
     - `2` → Borrow a book.
     - `3` → Return a book.
     - `4` → Exit the program.
   - Prompt the user for their choice and call the respective function.
   - Ensure input validation to handle invalid book titles.
