## Scenario:

## A team in a library is performing two tasks:

- 1. Task 1 (I/O-bound): Checking book availability online for 5 different books (2 seconds per request).
- 2. Task 2 (CPU-bound): Calculating the reading difficulty (simulated with a complex computation) for 5 books.

## **Instructions:**

- 1. Write two separate Python programs:
  - One uses Asyncio for Task 1 (book availability checks).
  - One uses Multiprocessing for Task 2 (difficulty calculation).
- 2. Compare the time taken for both tasks.

## What to Submit:

- 1. The modified code for both tasks.
- 2. Total time taken for each task.
- *3. Short answers to:* 
  - Why was Asyncio faster for I/O tasks?
  - Why was Multiprocessing better for CPU tasks?
  - What would happen if we swapped methods for the tasks?