



Day 20: File Handling Level - 2

1. **Simple Student CRUD Application:** Implement a Python program that maintains student data (name, roll number, grade) in a JSON file `students.json`. Allow adding, updating, deleting, and viewing student data.
2. **Task Manager:** Create a JSON file `tasks.json` and write a program that lets users add tasks (title, description, due date), mark tasks as completed, and delete tasks.
3. **Library Book Manager:** Create a file `library.json` where you can add books with details (title, author, year). Implement options to list all books, find a book by title, and delete a book.
4. **Contact Book:** Create a contact book that saves contact information (name, phone, email) to `contacts.json`. Allow adding, updating, viewing, and deleting contacts.
5. **To-Do List App:** Implement a simple to-do list that saves tasks to `todo.json`. Each task should have a title and status (complete or incomplete). Allow users to mark tasks as complete.
6. **Expense Tracker:** Write a program that tracks expenses. Each entry (description, amount, date) is saved in `expenses.json`. Include options to add, view, and delete entries.
7. **Reading a CSV File:** Create a CSV file `students.csv` with columns name, age, and grade. Write a program to read this file and display each student's information.
8. **Logging User Actions:** Create a program that logs user actions to a file `log.txt`. For each action, save the timestamp and a description of the action.
9. **Product Manager:** Develop a product manager where you can add, remove, and update product data in a file `products.json`. Each product should have a name, price, and quantity.

10. **Sales Record App:** Create a file `sales.json` and write a program to add sales records (item name, quantity sold, and sale price). Allow viewing all sales records and calculating the total revenue.