A lightweight Java project that allows users to manage a list of tasks directly from the terminal.

Objectives

- Understand basic Java syntax and structure
- Learn how to use collections like `ArrayList`
- Implement user input handling with `Scanner`
- Practice control structures (`if`, `switch`, `while`)
- Create a console-based menu system

Features

- ➕ Add tasks
- 🗑️ Delete tasks by number
- 📋 View all tasks
- 🚪 Exit the app safely

Source Code :

```
import java.util.ArrayList;
import java.util.Scanner;

public class ToDoListApp {


    static class TaskManager {
        private final ArrayList<String> tasks = new ArrayList<>();
```

```
    public void addTask(String task) {
        tasks.add(task);
        System.out.println("Task added!");
    }

    public void deleteTask(int index) {
        if (index >= 1 && index <= tasks.size()) {
            tasks.remove(index - 1);
            System.out.println("Task deleted.");
        } else {
            System.out.println("Invalid task number.");
        }
    }

    public void listTasks() {
        if (tasks.isEmpty()) {
            System.out.println("No tasks yet.");
        } else {
            System.out.println("\nYour Tasks:");
            for (int i = 0; i < tasks.size(); i++) {
                System.out.println((i + 1) + ". " + tasks.get(i));
            }
        }
    }
}


static class MenuUI {
    private final Scanner scanner = new Scanner(System.in);

    public void showMenu() {
        System.out.println("\n=== TO-DO LIST MENU ===");
        System.out.println("1. Add Task");
        System.out.println("2. Delete Task");
        System.out.println("3. View Tasks");
        System.out.println("4. Exit");
        System.out.print("Choose an option: ");
    }

    public String getUserChoice() {
        return scanner.nextLine();
    }

    public String getTaskInput() {
```

```
        System.out.print("Enter your task: ");
        return scanner.nextLine();
    }

    public int getTaskIndexToDelete() {
        System.out.print("Enter task number to delete: ");
        try {
            return Integer.parseInt(scanner.nextLine());
        } catch (NumberFormatException e) {
            return -1;
        }
    }
}


public static void main(String[] args) {
    TaskManager manager = new TaskManager();
    MenuUI menu = new MenuUI();
    boolean running = true;

    System.out.println("Welcome to the To-Do List App!");

    while (running) {
        menu.showMenu();
        String choice = menu.getUserChoice();

        switch (choice) {
            case "1":
                String task = menu.getTaskInput();
                manager.addTask(task);
                break;
            case "2":
                manager.listTasks();
                int index = menu.getTaskIndexToDelete();
                manager.deleteTask(index);
                break;
            case "3":
                manager.listTasks();
                break;
            case "4":
                System.out.println("Goodbye!");
                running = false;
                break;
            default:
```

```
                System.out.println("Invalid choice. Try again.");
            }
        }
    }
}
```