

Source code:

```
import java.util.ArrayList;

import java.util.Scanner;

import java.io.*;

// Simple To-Do List Manager using ArrayList and File Handling

public class TodoListManager {

    static class Task {

        String description;

        boolean done;

        Task(String description, boolean done) {

            this.description = description;

            this.done = done;

        }

        @Override

        public String toString() {

            return (done ? "[Done] " : "[Pending] ") + description;

        }

    }

    private static ArrayList<Task> tasks = new ArrayList<>();

    private static final String FILE_NAME = "tasks.txt";

    public static void main(String[] args) {

        loadTasksFromFile();

        Scanner scanner = new Scanner(System.in);

        while (true) {

            System.out.println("\n=== To-Do List Manager ===");
```

```
System.out.println("1. Add Task");

System.out.println("2. Remove Task");

System.out.println("3. Mark Task as Done");

System.out.println("4. View Pending Tasks");

System.out.println("5. Exit");

System.out.print("Choose an option (1-5): ");

String input = scanner.nextLine();

switch (input) {

    case "1":

        addTask(scanner);

        break;

    case "2":

        removeTask(scanner);

        break;

    case "3":

        markTaskDone(scanner);

        break;

    case "4":

        viewPendingTasks();

        break;

    case "5":

        saveTasksToFile();

        System.out.println("Exiting... Goodbye!");

        scanner.close();

        System.exit(0);

        break;
```

```
        default:

            System.out.println("Invalid option. Please try again.");

            break;

        }

    }

}

private static void addTask(Scanner scanner) {

    System.out.print("Enter task description: ");

    String desc = scanner.nextLine().trim();

    if (desc.isEmpty()) {

        System.out.println("Task description cannot be empty.");

        return;

    }

    tasks.add(new Task(desc, false));

    System.out.println("Task added successfully.");

}

private static void removeTask(Scanner scanner) {

    if (tasks.isEmpty()) {

        System.out.println("No tasks to remove.");

        return;

    }

    viewAllTasks();

    System.out.print("Enter task number to remove: ");

    String input = scanner.nextLine();

    try {

        int index = Integer.parseInt(input);
```

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        if (index < 1 || index > tasks.size()) {  
            System.out.println("Invalid task number.");  
            return;  
        }  
  
        Task removed = tasks.remove(index - 1);  
  
        System.out.println("Removed task: " + removed.description);  
    } catch (NumberFormatException e) {  
        System.out.println("Please enter a valid number.");  
    }  
}  
  
private static void markTaskDone(Scanner scanner) {  
    if (tasks.isEmpty()) {  
        System.out.println("No tasks to mark as done.");  
        return;  
    }  
  
    viewAllTasks();  
  
    System.out.print("Enter task number to mark as done: ");  
  
    String input = scanner.nextLine();  
  
    try {  
        int index = Integer.parseInt(input);  
  
        if (index < 1 || index > tasks.size()) {  
            System.out.println("Invalid task number.");  
            return;  
        }  
  
        Task task = tasks.get(index - 1);  
  
        if (task.done) {
```

```
        System.out.println("Task is already marked as done.");

    } else {

        task.done = true;

        System.out.println("Task marked as done: " + task.description);

    }

} catch (NumberFormatException e) {

    System.out.println("Please enter a valid number.");

}

}

private static void viewPendingTasks() {

    boolean found = false;

    System.out.println("\nPending Tasks:");

    for (int i = 0; i < tasks.size(); i++) {

        Task task = tasks.get(i);

        if (!task.done) {

            System.out.println((i + 1) + ". " + task.description);

            found = true;

        }

    }

    if (!found) {

        System.out.println("No pending tasks found.");

    }

}

private static void viewAllTasks() {

    System.out.println("\nAll Tasks:");

    for (int i = 0; i < tasks.size(); i++) {

        Task task = tasks.get(i);
```

```
String status = task.done ? "[Done]" : "[Pending]";    System.out.println((i + 1)  
+ ". " + status + " " + task.description);    }
```