

MINI PROJECT

(MEGAVARSHINI A)

TO DO LIST

Source Code:

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

class Task {
    String description;
    boolean isCompleted;
    Task(String description) {
        this.description = description;
        this.isCompleted = false;
    }
    void markAsComplete() {
        this.isCompleted = true;
    }
    @Override
    public String toString() {
        // Use Unicode for checkmark ✓ (\u2714) and empty box (\u25FB)
        return (isCompleted ? "[completed] " : "[ ] ") + description;
    }
}

public class ToDoListApp {
    private static ArrayList<Task> tasks = new ArrayList<>();
    public static void addTask(String description) {
        tasks.add(new Task(description));
        System.out.println("Task added successfully!");
    }
}
```

```

public static void deleteTask(int index) {
    if (index >= 0 && index < tasks.size()) {
        tasks.remove(index);
        System.out.println("Task deleted successfully!");
    } else {
        System.out.println("Invalid task index!");
    }
}

```

```

public static void displayTasks() {
    if (tasks.isEmpty()) {
        System.out.println("No tasks in the list.");
    } else {
        System.out.println("\n--- To-Do List ---");
        for (int i = 0; i < tasks.size(); i++) {
            System.out.println(i + ". " + tasks.get(i));
        }
    }
}

```

```

public static void markTaskComplete(int index) {
    if (index >= 0 && index < tasks.size()) {
        tasks.get(index).markAsComplete();
        System.out.println("Task marked as complete!");
    } else {
        System.out.println("Invalid task index!");
    }
}

```

```

public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    boolean running = true;

```

```

while (running) {
    System.out.println("\n--- To-Do List Menu ---");
    System.out.println("1. Add Task");
    System.out.println("2. Delete Task");
    System.out.println("3. Display Tasks");
    System.out.println("4. Mark Task as Complete");
    System.out.println("5. Exit");
    System.out.print("Choose an option: ");

    int choice;

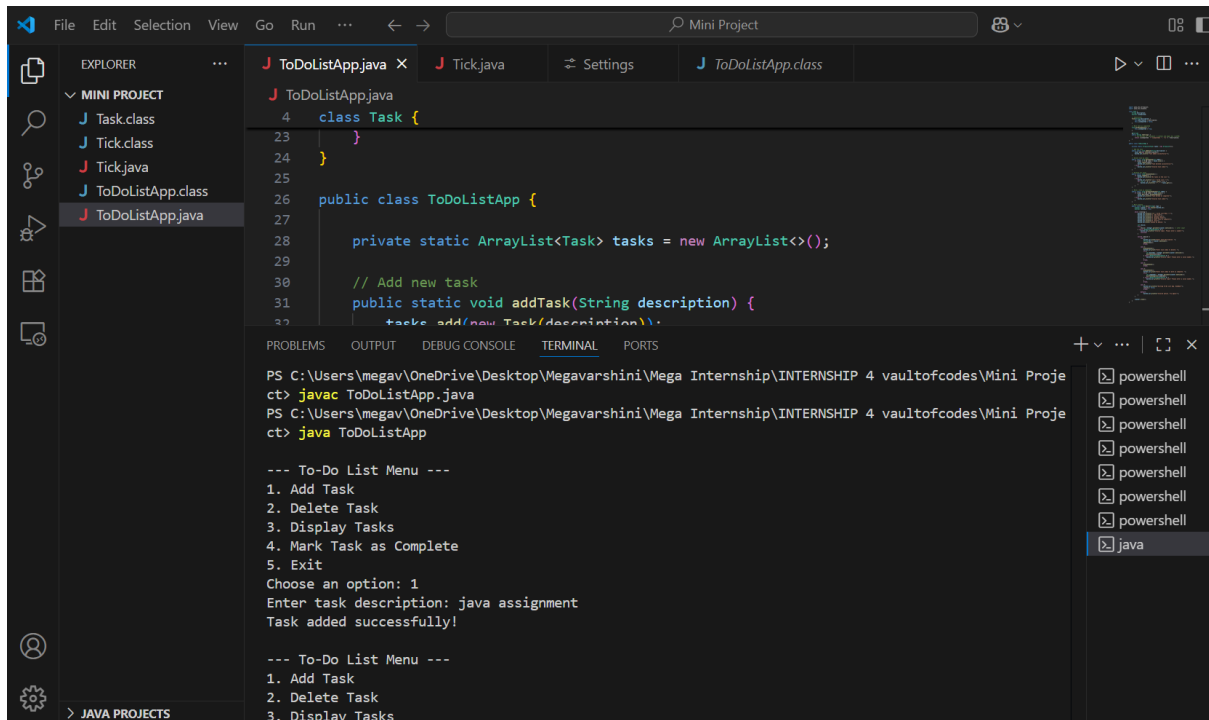
    try {
        choice = Integer.parseInt(scanner.nextLine()); // safer input
    } catch (NumberFormatException e) {
        System.out.println("Invalid input. Please enter a number!");
        continue;
    }

    switch (choice) {
        case 1:
            System.out.print("Enter task description: ");
            String desc = scanner.nextLine();
            addTask(desc);
            break;
        case 2:
            displayTasks();
            System.out.print("Enter task index to delete: ");
            try {
                int delIndex = Integer.parseInt(scanner.nextLine());
                deleteTask(delIndex);
            } catch (NumberFormatException e) {
                System.out.println("Invalid input! Please enter a valid number.");
            }
    }
}

```

```
        break;
    case 3:
        displayTasks();
        break;
    case 4:
        displayTasks();
        System.out.print("Enter task index to mark as complete: ");
        try {
            int compIndex = Integer.parseInt(scanner.nextLine());
            markTaskComplete(compIndex);
        } catch (NumberFormatException e) {
            System.out.println("Invalid input! Please enter a valid number.");
        }
        break;
    case 5:
        System.out.println("Exiting To-Do List App. Goodbye!");
        running = false;
        break;
    default:
        System.out.println("Invalid option. Try again!");
    }
}
scanner.close();
}
```

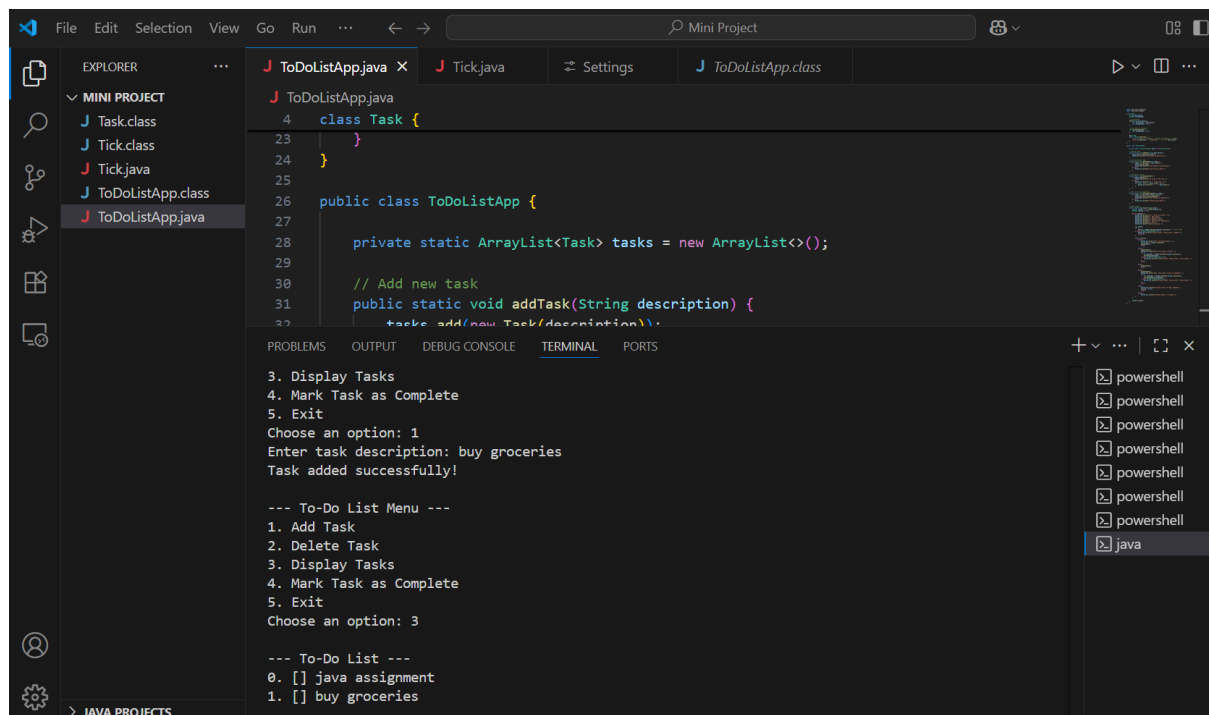
Output Screenshot:



```
PS C:\Users\megav\OneDrive\Desktop\Megavarshini\Mega Internship\INTERNSHIP 4 vaultofcodes\Mini Proje
ct> javac ToDoListApp.java
PS C:\Users\megav\OneDrive\Desktop\Megavarshini\Mega Internship\INTERNSHIP 4 vaultofcodes\Mini Proje
ct> java ToDoListApp

--- To-Do List Menu ---
1. Add Task
2. Delete Task
3. Display Tasks
4. Mark Task as Complete
5. Exit
Choose an option: 1
Enter task description: java assignment
Task added successfully!

--- To-Do List Menu ---
1. Add Task
2. Delete Task
3. Display Tasks
```



```
3. Display Tasks
4. Mark Task as Complete
5. Exit
Choose an option: 1
Enter task description: buy groceries
Task added successfully!

--- To-Do List Menu ---
1. Add Task
2. Delete Task
3. Display Tasks
4. Mark Task as Complete
5. Exit
Choose an option: 3

--- To-Do List ---
0. [] java assignment
1. [] buy groceries
```

