# 07-Java_Assignment

## 1️⃣ ArrayList - Online Music Playlist 🎵

🎯 **Scenario:** Create a **Music Playlist** where users can **add, remove, display, and shuffle songs**.

🔷 **Steps:**

- Use an `ArrayList<String>` to store song names.
- Provide options:

  ✅ Add a song

  ✅ Remove a song

  ✅ Display all songs

  ✅ Shuffle songs (Use `Collections.shuffle()`)

📝 **Example Output:**

```
1. Add Song
2. Remove Song
3. Display Playlist
4. Shuffle Playlist
Enter choice: 1
Enter song name: Shape of You
✅ Song added to playlist!
```

## 2️⃣ ArrayList - Student Attendance System 🎓

🎯 **Scenario:** Track student attendance using an **ArrayList**.

🔷 **Steps:**

- Store **student names** in an `ArrayList<String>`.
- Provide options:

  ✅ Mark student **Present** (Add name)

  ✅ Mark student **Absent** (Remove name)

  ✅ Display Present Students

📝 **Example Output:**

```
1. Mark Present
2. Mark Absent
3. Display Present Students
Enter choice: 1
Enter Student Name: Rahul
✅ Rahul marked Present!
```

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## 3️⃣ LinkedList - Browser History 🌐

🎯 **Scenario:** Simulate a **browser history** using a **LinkedList**.

🔷 **Steps:**

- Use a `LinkedList<String>` to store visited websites.
- Provide options:

  ✅ Visit a website (Add to list)

  ✅ Go **back** (Remove last visited website)

  ✅ Display browsing history

📝 **Example Output:**

```
1. Visit Website
2. Go Back
3. Show History
Enter choice: 1
Enter Website: youtube.com
✅ youtube.com added to history!
```

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## 4️⃣ LinkedList - Task Manager 📋

🎯 **Scenario:** Implement a **Task Manager** where users can **add, remove, and complete tasks**.

🔹 **Steps:**

- Use a `LinkedList<String>` to store tasks.
- Provide options:

  ✅ Add Task

  ✅ Remove Task

  ✅ Mark Task as Completed

  ✅ View Pending Tasks

📝 **Example Output:**

```
1. Add Task
2. Remove Task
3. Mark Task Completed
4. View Pending Tasks
Enter choice: 1
Enter Task: Finish Java Assignment
✅ Task added!
```

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## 🚀 Submission Guidelines:

✔️ Implement each program separately & test it.

✔️ Use proper method names & follow coding best practices.

✔️ Make sure user input handling is done properly.