**> Creating an in-memory store for recently played songs that can accommodate N songs per user, with a fixed initial capacity using java and junit as a test runner framework.**

import org.junit.Test;

import java.util.List;

import static org.junit.Assert.assertEquals;

public class RecentlyPlayedStoreTest {

private RecentlyPlayedStore store = new RecentlyPlayedStore(3);

@Test

public void testAddAndGetSongs() {

String userId = "user1";

store.addSong(userId, "S1");

store.addSong(userId, "S2");

store.addSong(userId, "S3");

store.addSong(userId, "S4");

store.addSong(userId, "S2");

store.addSong(userId, "S1");

List<String> recentSongs = store.getRecentSongs(userId, 3);

assertEquals(3, recentSongs.size());

assertEquals("S1", recentSongs.get(0));

assertEquals("S2", recentSongs.get(1));

assertEquals("S4", recentSongs.get(2));

}

}