Music Player

Array methods

Required methods for the following exercises: map, filter, reduce, spread.

1. Retrieve Song Titles

- Input: An array of song objects.
- **Task:** Return a new array that contains only the titles of each song.
- Example:
 - Input:

```
[{ title: "Bohemian Rhapsody" }, { title: "Hotel California" }, {
title: "Imagine" }]
```

Expected Output:

```
["Bohemian Rhapsody", "Hotel California", "Imagine"]
```

2. Filter Songs by Artist

- Input: An array of song objects, an artist name.
- **Task:** Return a new array containing only songs by the specified artist.
- Example:
 - Input:

```
[{ title: "Bohemian Rhapsody", artist: "Queen" }, { title: "Hotel
California", artist: "Eagles" }, { title: "Imagine", artist:
"John Lennon" }], artist = "Queen"
```

Expected Output: [{ title: "Bohemian Rhapsody", artist: "Queen" }]

3. Calculate Total Song Duration

- Input: An array of song objects.
- **Task:** Calculate and return the total duration of all songs.
- Example:
 - Input:

```
[{ duration: "5:55" }, { duration: "6:30" }, { duration: "3:02" }]
```

Expected Output: 908 (total duration in seconds)

> Helper function for Exercise 3: Get Song Duration in Seconds

```
const getSongDurationInSeconds = (duration) => {
  const [minutes, seconds] = duration.split(':');
  return (parseInt(minutes) * 60 + parseInt(seconds));
};
```

4. Combine Song Titles and Artists

- Input: An array of song objects.
- Task: Return a new array with strings combining the song title and its artist. Each string should be formatted as "{title} - {artist}".
- Example:
 - Input:

```
[{ title: "Bohemian Rhapsody", artist: "Queen" }, { title: "Hotel
California", artist: "Eagles" }]
```

Expected Output:

```
["Bohemian Rhapsody - Queen", "Hotel California - Eagles"]
```

5. Update Song Duration

- **Input:** An array of song objects, a new duration value, and a song title.
- Task: Update the duration of the specified song in the array and return the updated array.
- Example:
 - Input:

```
[{ title: "Bohemian Rhapsody", duration: "5:55" }, { title:
"Hotel California", duration: "6:30" }], newDuration = "4:15",
title = "Bohemian Rhapsody"
```

Expected Output:

```
[{ title: "Bohemian Rhapsody", duration: "4:15" }, { title:
"Hotel California", duration: "6:30" }]
```

6. Filter Songs by Duration

• **Input:** An array of song objects, a minimum duration value.

 Task: Return a new array containing only songs with a duration equal to or greater than the provided value.

Example:

■ Input:

```
[{ duration: "5:55" }, { duration: "6:30" }, { duration: "3:02" }], minDuration = 4
```

■ Expected Output: [{ duration: "5:55" }, { duration: "6:30" }]

7. Retrieve Song Artists

- Input: An array of song objects.
- Task: Return a new array that contains all the artists of the songs.
- Example:
 - Input:

```
[{ artist: "Queen" }, { artist: "Eagles" }, { artist: "John
Lennon" }]
```

Expected Output: ["Queen", "Eagles", "John Lennon"]

8. Sort Songs by Duration

- **Input:** An array of song objects.
- Task: Return a new array sorted by song duration in ascending order.
- Example:
 - Input:

```
[{ duration: "5:55" }, { duration: "6:30" }, { duration: "3:02" }]
```

Expected Output:

```
[{ duration: "3:02" }, { duration: "5:55" }, { duration: "6:30" }]
```

9. Retrieve Song Lyrics

- Input: An array of song objects.
- **Task:** Return a new array that contains all the lyrics of the songs.
- Example:
 - Input:

```
[{ lyrics: "Is this the real life? Is this just fantasy?" }, {
lyrics: "On a dark desert highway, cool wind in my hair" }]
```

Expected Output:

["Is this the real life? Is this just fantasy?", "On a dark desert highway, cool wind in my hair"]