

ASSIGNMENT 1

You have a long list of the songs in your album music. Each song has the following information:

- Song name (String)
- Artist (String)
- Rated (int)

The information of the song list is stores in the file “songs.txt” with the format:

<song name>|<artist>|<rated>

For example:

Fields of gold|Eva Cassidy|2

Dancing in the moonlight|Jubel|3

Fields of gold|Fourplay|2

Papa|Paul Anka|4

Dancing in the moonlight|King Harvest|4

Fields of gold|Celtic Woman|3

YOUR TASK:

1. Reading the list of the songs from the file and store in the linked list with the same order.
2. Traverse the linked list you just created.
3. Input a song name, display information of the songs which have that name.

For example: Input a song name: **Fields of gold**

Display information of the songs which have that name:

Fields of gold|Celtic Woman|3

Fields of gold|Fourplay|2

Fields of gold|Eva Cassidy|2

4. With the songs found in the step 3, delete all the song which have lowest rated, and traverse the linked list after deleting. For example:

~~Fields of gold|Eva Cassidy|2~~

Dancing in the moonlight|Jubel|3

~~Fields of gold|Fourplay|2~~

Papa|Paul Anka|4

Dancing in the moonlight|King Harvest|4

Fields of gold|Celtic Woman|3

5. Write the list after step 4 to the file “output.txt” with the same format of the input file.
6. Find all the song with the highest rated in the list, move them to the head of the list.
For example, with the input from file above, the highest rated = 4, so the list should be:

Papa|Paul Anka|4

Dancing in the moonlight|King Harvest|4

Fields of gold|Eva Cassidy|2

Dancing in the moonlight|Jubel|3

Fields of gold|Fourplay|2

Fields of gold|Celtic Woman|3