Assignment 2

CS 1083 FR01A

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PlayList.java

```java
public PlayList addSong(Song songIn){
                //TO DO: Complete this method
                int newLength = list.length + 1;
                Song [] newPlaylist = new Song[newLength];
                PlayList finalPlaylist;
                long newSong = songIn.getId();
                boolean found = true;
                int locationCounter=0;


                while (found= false){
                        for (int i=0; i<list.length; i++) {//find placement-see where it fits
                                Song refSong = list[i];

                                        if (newSong < refSong.getId()){
                                                found =true;
                                        }
                                locationCounter++;
                        }
                }


                for (int i =0; i < newLength; i++){

                        if (i<=(locationCounter)){
                                newPlaylist[i]=list[i];
                        }
                        if (i==locationCounter+1){
                                newPlaylist[i]= songIn;
                        }

                        if (i>locationCounter+1){

                                newPlaylist[i]=list[i-1];
                        }

                }

                finalPlaylist = new PlayList(newPlaylist);
```

```
                return finalPlaylist;

        }
```

b.

<u>Input</u>

7

22456321239,Off He Goes ,1

22456321241,Red Mosquito,2

22456321242,Present Tense,2

22456321245,My Poor Brain,2

22456321250,New Way Home,4

22456321255,Lake on Fire,3

22456321261,The Distance,4

6

22456321243,Face and Ghost,2

22456321245,My Poor Brain,2

22456321247,Enough Space,4

22456321249,February Stars,1

22456321250,New Way Home,4

22456321267,Space Travel,5

22456321259,One Hit Wonder,2

<u>Output</u>

```
C:\Users\kisen\Java2\Asgn2>java TestPlayList<TestCase1.dat
22456321239     Off He Goes     1
22456321241     Red Mosquito    2
22456321242     Present Tense   2
22456321245     My Poor Brain   2
22456321250     New Way Home    4
22456321255     Lake on Fire    3
22456321261     The Distance    4

The highest rated songs are:
22456321250     New Way Home    4
22456321261     The Distance    4

Updated playlist:
22456321239     Off He Goes     1
22456321241     Red Mosquito    2
22456321242     Present Tense   2
22456321245     My Poor Brain   2
22456321250     New Way Home    4
22456321255     Lake on Fire    3
22456321259     One Hit Wonder  2
22456321261     The Distance    4

22456321243     Face and Ghost  2
22456321245     My Poor Brain   2
22456321247     Enough Space    4
22456321249     February Stars  1
22456321250     New Way Home    4
22456321267     Space Travel    5

There are 2 songs found in both play lists
```
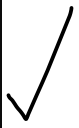
Testing

```
22456321239      Off He Goes      1
22456321241      Red Mosquito     2
22456321242      Present Tense    2
22456321245      My Poor Brain    2
22456321250      New Way Home     4
22456321255      Lake on Fire     3
22456321261      The Distance     4


The highest rated songs are:
22456321250      New Way Home     4
22456321261      The Distance     4
```

In this case there were two songs with the highest rated value of 4. A new playlist was returned with both of them.

```
Updated playlist:
22456321239      Off He Goes      1
22456321241      Red Mosquito     2
22456321242      Present Tense    2
22456321245      My Poor Brain    2
22456321250      New Way Home     4
22456321255      Lake on Fire     3
22456321259      One Hit Wonder   2
22456321261      The Distance     4
```

In this case the song One Hit Wonder was added to the playlist in the correct location.

```
Updated playlist:
22456321239      Off He Goes      1
22456321241      Red Mosquito     2
22456321242      Present Tense    2
22456321245      My Poor Brain    2
22456321250      New Way Home     4
22456321255      Lake on Fire     3
22456321259      One Hit Wonder   2
22456321261      The Distance     4

22456321243      Face and Ghost   2
22456321245      My Poor Brain    2
22456321247      Enough Space     4
22456321249      February Stars   1
22456321250      New Way Home     4
22456321267      Space Travel     5

There are 2 songs found in both play lists
```

In this case New Way Home and My Poor Brain were found in both playlists.

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