The file `songs.txt` contains information about the top songs on the Billboard Top 100 chart for this week. Each line of the file contains information about one song:
- The song's title
- The song's artist
- The song's place on the chart the previous week (-1 if this is the first week for the song to appear on the chart)
- The number of weeks the song has been on the chart (e.g., 1 if this is the first week for the song on the chart)

A semicolon (;) is used to separate these four parts on a single line of the file.

Try writing the following programs:
1. Write a program to open the file and print all the information in the file. Make sure to correctly open the file, use a for loop to read each line, rstrip the line, and split the line into the four pieces. Don't forget to convert the place on the chart and the number of weeks on the chart into integers!

2. Write a program to print the names and artists of all the songs that have been on the chart for at least 8 weeks.

3. Write a program to print the name and artist of the song that has been on the chart the longest (most number of weeks), and the name and artist of the song that has been on the chart the fewest number of weeks.

   Hint: first write the program to just find the largest/smallest number of weeks on the chart, then change your code so it also saves the artist and title, as well as the number of weeks.

4. Write a program to print the name of song on the chart, along with a message saying whether
   - the song moved up the chart from the previous week (that is, it's position on the chart this week is less than its position the previous week), and how much the position changed,
   - the song moved down the chart from the previous week, and how much the position changed,
   - the song stayed the same when compared to the previous week, or
   - the song is a new song on the chart (it wasn't even on the chart the previous week).

   Obviously only one of the four situations will apply to each song on the chart

5. Write a program to find and print all occurrences of an artist having two songs in back-to-back positions on the chart. Hint – use the sliding window technique.

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Royals;Lorde;1;15
Wrecking Ball;Miley Cyrus;3;8
Roar;Katy Perry;2;10
Wake Me Up;Avicii;4;16
Hold On, We're Going Home;Drake Featuring Majid Jordan;5;10
The Fox;Ylvis;6;6
Holy Grail;Jay Z Featuring Justin Timberlake;7;14
Applause;Lady Gaga;9;9
Blurred Lines;Robin Thicke Featuring T.I. + Pharrell;8;26
Summertime Sadness;Lana Del Rey & Cedric Gervais;10;14
We Can't Stop;Miley Cyrus;14;19
Safe and Sound;Capital Cities;11;24
Heartbreaker;Justin Bieber;77;2
23;Mike WiLL Made-It Featuring Miley Cyrus, Wiz Khalifa & Juicy J;17;4
Radioactive;Imagine Dragons;15;59
Berzerk;Eminem;12;7
Survival;Eminem;-1;1
That's My Kind of Night;Luke Bryan;16;9
Counting Stars;One Republic;21;17
Demons;Imagine Dragons;24;25
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