

Lab 2

iPod Playlist

Objective:

To read a file into `string` objects and to manipulate them using new `string` class members.

Assignment:

The file `Playlist.txt` contains the track information for an iPod Playlist of an *unknown* number of tracks stored in the following format. The first line is the playlist name, followed by several lines containing the song title, time, and artist. You should create your own using the IDE or TextEdit with Rich Text Formatting turned off.

```
My Cool Playlist
"You and whose army" 3:09 Radiohead
"Kashmir" 8:32 Led Zeppelin
...
"London Calling" 3:23 The Clash
"Hate to Say I Told You So" 3:19 The Hives
```

Your job is to read the data from this file, and output each song as shown below along with the total playing time for the playlist:

```
My Cool Playlist
-----
1. 3:09 You and whose army by Radiohead
2. 8:32 Kashmir by Led Zeppelin
...
9. 3:23 London Calling by The Clash
10. 3:19 Hate to Say I Told You So by The Hives
-----
Total Playing Time = 1:10:22
```

Your program should contain separate functions for: reading the file one line at a time (hint), calculating the total time, and displaying the data in the format shown above. No song will contain an hour digit, but the minutes may go as high as 99. Be sure you consider the output appropriately. 2:3:20 does not mean the same as 2:03:30. You may find the `fill` and `setw` functions useful in outputting the time, and `getline` and `atoi` for reading in and converting.

For more information on these functions see the Reference for `iomanip`. Display must appear exactly as formatted above.