```
1
 2 sddsddsaddad
3 """
 4
 5 import csv
 6
7
8 def main():
9
       menu_selection = ""
10
       while menu selection != "Q":
11
           open_file = open("songs.csv")
12
           song_list = list(csv.reader(open_file, delimiter=","))
13
           print("-----Songs To Learn 1.0 - by YangYang Li
           ----")
           print(len(song_list), "songs loaded")
14
15
           print("Menu:\n L - List songs\n
                                                A - Add new song\n
                                                                         C
    - Complete a song\n
                           Q - Quit")
           menu_selection = input("Enter the choice: ").upper()
16
17
           open_file.close()
18
           # Display song list prints a formatted table of songs from
   song list
19
           if menu selection == "L":
20
               not_learned_songs = 0
21
               learned_songs = 0
22
               for index, data in enumerate(song list):
23
                   if data[3] == "u":
24
                       print(index, "* {:40s} - {:30s} ({})".format(data
   [0], data[1], data[2]))
25
                       not_learned_songs += 1
26
                   else:
                       print(index, " {:40s} - {:30s} ({})".format(data
27
   [0], data[1], data[2]))
28
                       learned songs += 1
29
               print("{} songs learned, {} songs still need to learn".
   format(learned_songs, not_learned_songs))
30
31
           # Adds songs details from user input and adds it to the song
   list
32
           elif menu selection == "A":
33
               title = str(input("Title:"))
34
               while title == "":
                   print("Input cannot be blank.")
35
36
                   title = str(input("Title:"))
37
               artist = str(input("Artist:"))
38
39
               while artist == "":
40
                   print("Input cannot be blank.")
41
                   artist = str(input("Artist:"))
42
43
               while True:
44
                   try:
45
                       year = int(input("Year: "))
46
                       if year <= 0:
47
                           print("Numbers must be >0")
48
                       else:
```

```
49
                            break
50
                   except ValueError:
                        print("Invalid input; enter valid numbers")
51
               new song = [title, artist, year, 'u']
52
               song list.append(new song)
53
54
               print("{} by {} ({}) added to song list".format(title,
   artist, year))
               # open file = open('SongList.csv', 'w', newline='')
55
56
               # song_list.append(new song)
               # writer = csv.writer(open file, delimiter=",")
57
58
               # for lines in song list:
59
                     writer.writerow(lines)
60
               # open_file.close()
61
           # Gets a song number from the user and marks the song as
62
   completed
           elif menu selection == "C":
63
               completed_song = 0
64
               for complete in song_list:
65
66
                    if complete[3] == "u":
67
                        completed song -= 1
               if completed song != 0:
68
69
                   # valid_input = False
                   # while not valid_input:
70
71
                   while True:
72
                        try:
73
                            song learned = int(input("Enter a number of
   a song to mark as learned: "))
74
                            if song learned < 0:</pre>
75
                                print("Number must be more than >= 0")
                            elif song_learned > len(song_list):
76
                                print("Song number not in the list. The
77
   list goes up to {}".format(len(song list) - 1))
78
                            else:
79
                                break
80
                        except ValueError:
                            print("Invalid input; enter a valid number."
81
   )
82
                   for index, data in enumerate(song list):
                        if index == song_learned:
83
                            if data[3] == "u":
84
                                data[3] = "1"
85
86
                                print("{} by {} learned".format(data[0
   ], data[1]))
87
                            else:
                                print("You have already learned {}".
88
   format(data[0]))
89
               else:
                   print("No more song to learn!")
90
               open_file = open("songs.csv", "w", newline="")
91
92
               writer = csv.writer(open_file, delimiter=",")
93
               for lines in song_list:
94
                   writer.writerow(lines)
95
               open_file.close()
96
```

```
97
             # Exit the program
 98
             elif menu_selection == "Q":
                 menu selection = "Q"
99
                 open_file = open("songs.csv", "w", newline="")
writer = csv.writer(open_file, delimiter=",")
100
101
102
                 for lines in song_list:
103
                     writer.writerow(lines)
104
                 open_file.close()
105
                 print(len(song_list), "songs saved to songs.cvs\n Have a
     nice day :)")
106
             else:
107
                 print("Invalid menu choice! Please enter again!")
108
                 print("Menu:\n L - List songs\n A - Add new song\n
        C - Complete a song\n
                                    Q - Quit")
109
                 menu_selection = input("Enter the choice: ").upper()
110
111
112 main()
113
```