

```
1 from bs4 import BeautifulSoup
2 import requests
3 import spotipy
4 from spotipy.oauth2 import SpotifyOAuth
5
6 # Scraping Billboard 100
7 date = input("Which year do you want to travel to?
   Type the date in this format YYYY-MM-DD: ")
8 response = requests.get("https://www.billboard.com/
   charts/hot-100/" + date)
9 soup = BeautifulSoup(response.text, 'html.parser')
10 song_names_spans = soup.find_all("span", class_="
   chart-element__information__song")
11 song_names = [song.getText() for song in
   song_names_spans]
12
13 #Spotify Authentication
14 sp = spotipy.Spotify(
15     auth_manager=SpotifyOAuth(
16         scope="playlist-modify-private",
17         redirect_uri="http://example.com",
18         client_id=YOUR CLIENT ID,
19         client_secret=YOUR CLIENT SECRET,
20         show_dialog=True,
21         cache_path="token.txt"
22     )
23 )
24 user_id = sp.current_user()["id"]
25 print(user_id)
26
27 #Searching Spotify for songs by title
28 song_uris = []
29 year = date.split("-")[0]
30 for song in song_names:
31     result = sp.search(q=f"track:{song} year:{year}"
32     , type="track")
33     print(result)
34     try:
35         uri = result["tracks"]["items"][0]["uri"]
36         song_uris.append(uri)
37     except IndexError:
```

```
37         print(f"{song} doesn't exist in Spotify.  
    Skipped.")  
38  
39 #Creating a new private playlist in Spotify  
40 playlist = sp.user_playlist_create(user=user_id, name  
    =f"{date} Billboard 100", public=False)  
41 print(playlist)  
42  
43 #Adding songs found into the new playlist  
44 sp.playlist_add_items(playlist_id=playlist["id"],  
    items=song_uris)
```