

## **INST126 Final Project Documentation**

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### **Description:**

This project is designed to take data from Spotify's USA Top 40 chart and provide information about the charts. It will input both the USA Top 40 weekly and daily chart. The program will then put songs into data frames, containing their rank and artist, show how each song rank changed over the course of the week, display graphs and data about each song, and display which artist has the most songs on the USA Top 40 chart for any given day.

### **Startup Explanation:**

To run the program, the user must input "us-daily.csv" and "weekly-list.csv" csv files, respectively into the main function.

### **Interpretation:**

The program will output dataframes containing the song rank, song name, and song artist for Spotify USA Top 40 weekly and daily lists. The program will also output a dataframe that displays a songs weekly rank, song name, song artist, and how the song changed over the course of the week for that given day. The program will return the name of the most popular artist for the day (according to the Top 40 daily chart). Finally the program will print a scatterplot graph comparing any given songs weekly daily ratio ranking.

### **Annotations:**

read\_songs\_weekly():

Line: 28

Desc: df\_weekly=df\_weekly.loc[:,~df\_weekly.columns.str.contains('^Unnamed')]

URL:<https://stackoverflow.com/questions/43983622/remove-unnamed-columns-in-pandas-dataframe/43983654>

Author: MaxU

song\_rank():

Line: 39

Desc:df\_weekly=df\_weekly.loc[:,~df\_weekly.columns.str.contains('^Unnamed')]

URL:<https://stackoverflow.com/questions/43983622/remove-unnamed-columns-in-pandas-dataframe/43983654>

Author: MaxU

top\_artist():

Lines: 73 - 75

Desc: Portions taken from stackoverflow

URL:<https://stackoverflow.com/questions/268272/getting-key-with-maximum-value-in-dictionary>)

Authors: unbeknown, Priyanka Chaudhary