Programming, Problem Solving, and Algorithms

CPSC203, 2023 W2

Announcements

- Reminder: I respond to Q4 of Learning Logs!
 - Comments/feedback have been released
 - Remember to look at our sample answers for Q1
- Test 2 results are released
- Lab4 is this week
 - More on Lists and Dictionaries
- Problem of the Week 5 is due this week
 - Functions and dictionaries

Today's Plan...

- 1. Announcements! (5 mins)
- 2. Weekly Videos Review/Questions (10 mins)
- 3. Pandas and Plotting demos (65 mins)

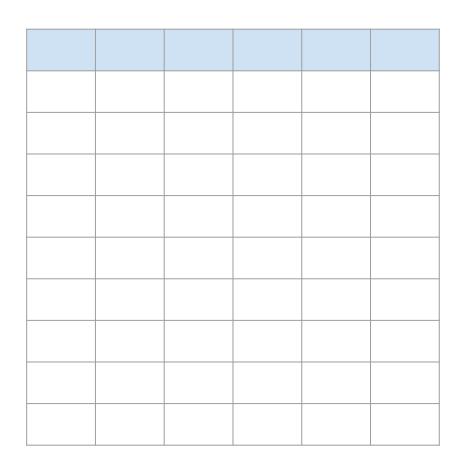
Slides from the Assigned Videos

Given last week's chart,

- 1) How many new songs were there?
- 2) What's the average peak?
- 3) Among those who were on the list for more than 10wk, what's the average peak? (is it very different than the previous answer?)
- 4) Which song changed the most? Was it rising or falling?
- 5) Write and answer your own question:

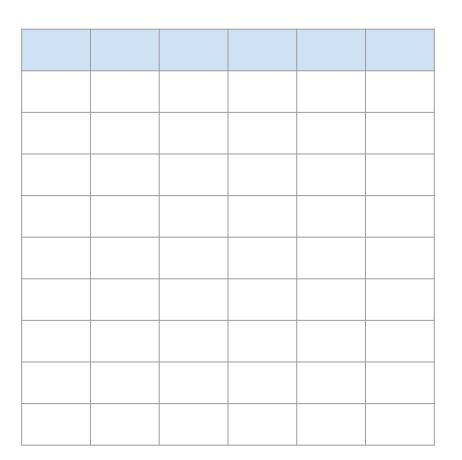
Given last week's chart,

How many new songs were there?



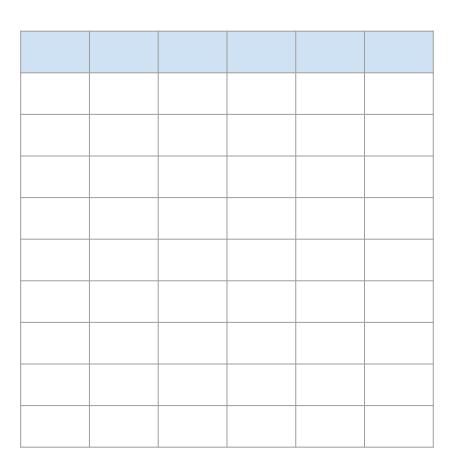
Given last week's chart,

What's the average peak?



Given last week's chart,

Among those who were on the list for more than 10wk, what's the average peak? (is it very different than the previous answer?)



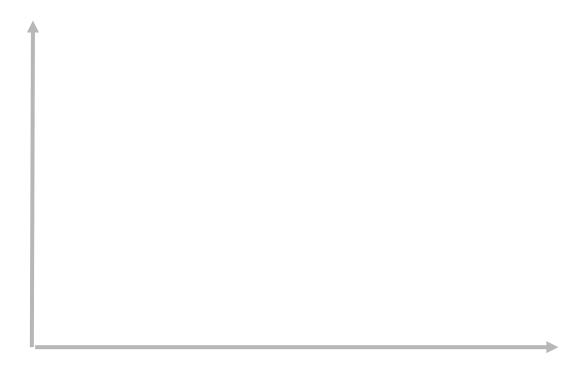
Given last week's chart,

Which song moved the most? Did it rise or fall?

Given last week's chart,

Write and answer your own question:

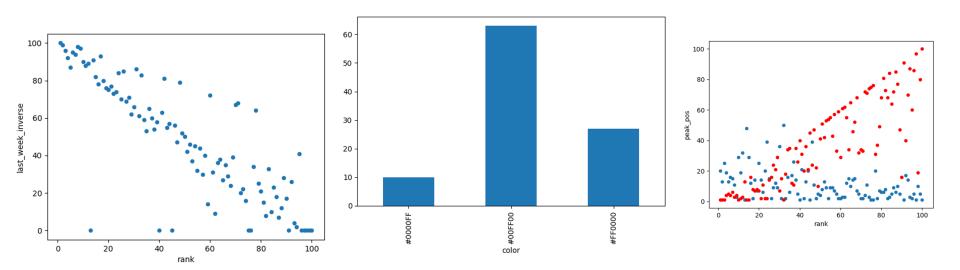
The Plot Thickens...

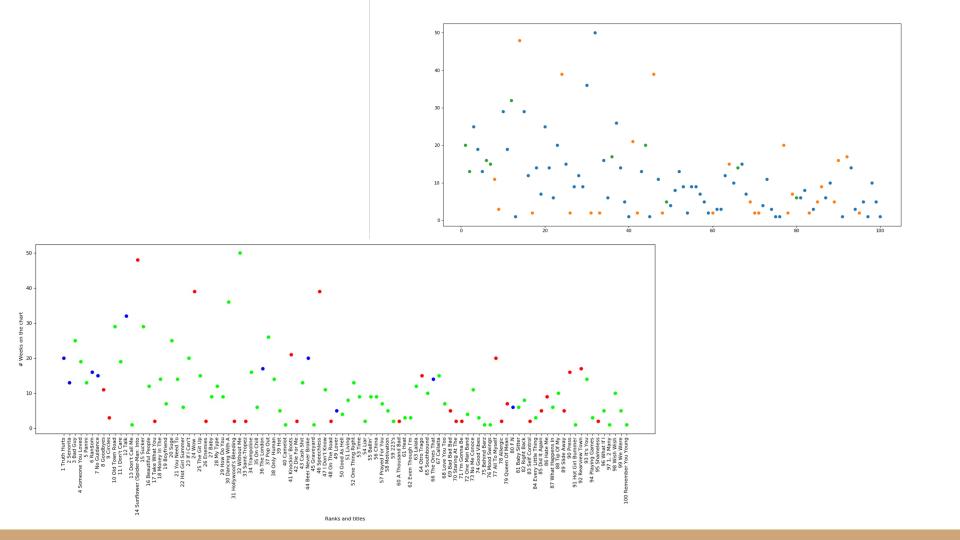


Plotting with Pandas

Several approaches, all fine. Best strategy is to sketch and find examples!

Nice reference: http://queirozf.com/entries/pandas-dataframe-plot-examples-with-matplotlib-pyplot





References

https://pymotw.com/2/datetime/

https://www.dataschool.io/best-python-pandas-resources/

https://pandas.pydata.org/Pandas_Cheat_Sheet.pdf

http://queirozf.com/entries/pandas-dataframe-plot-examples-with-matplotlib-pyplot

Seaborn

Slides from the Assigned Videos

Pandas and Plotting Demos