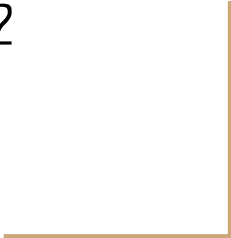


# Programming, Problem Solving, and Algorithms

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



# Some challenges...

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:
-

## Some challenges...

Given last week's chart,

How many new songs were there?

[illegible]

• • •

## Some challenges...

Given last week's chart,

## What's the average peak?

	0	1	2	3	4	5
6						
7						
8						
9						
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						
K						
L						
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O						
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Q						
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T						
U						
V						
W						
X						
Y						
Z						

## Some challenges...

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?)

[illegible]

•



## Some challenges...

Given last week's chart,

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

[illegible]

# Some challenges...

Given last week's chart,

Write and answer your own question:

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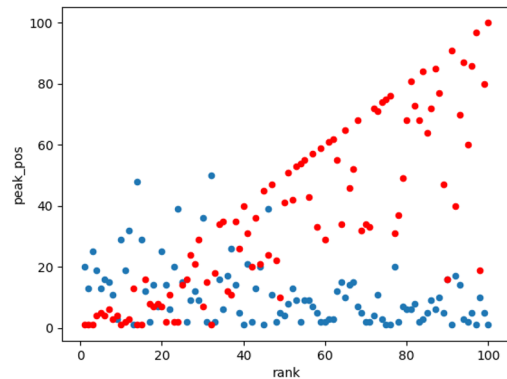
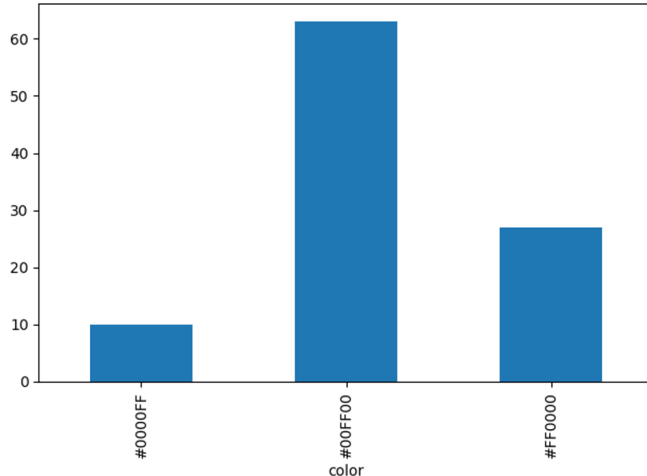
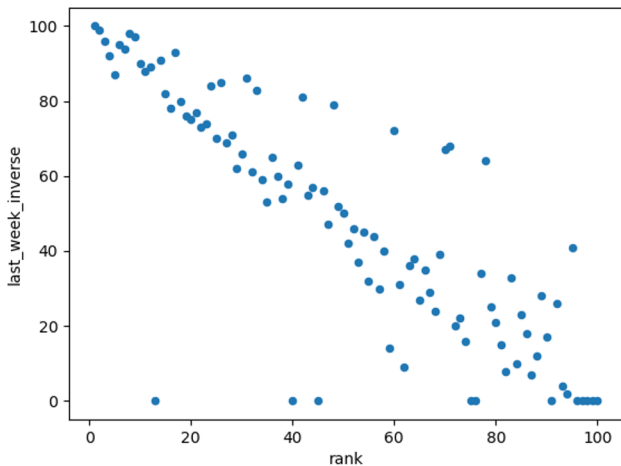
# The Plot Thickens...

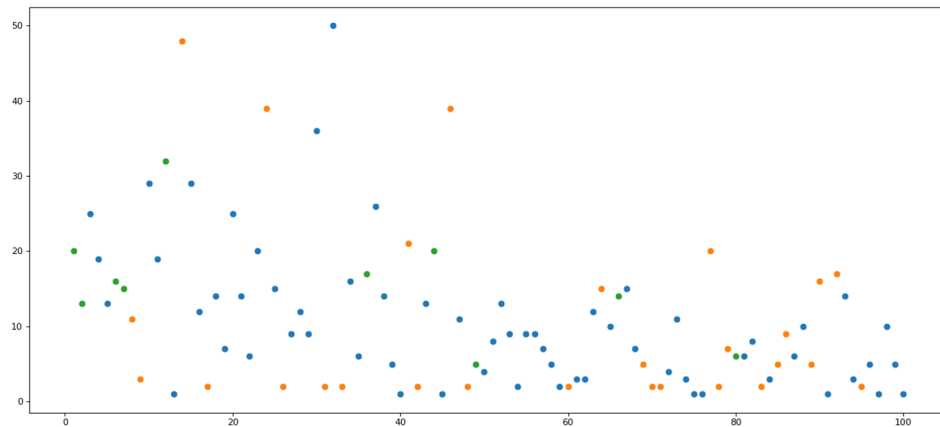
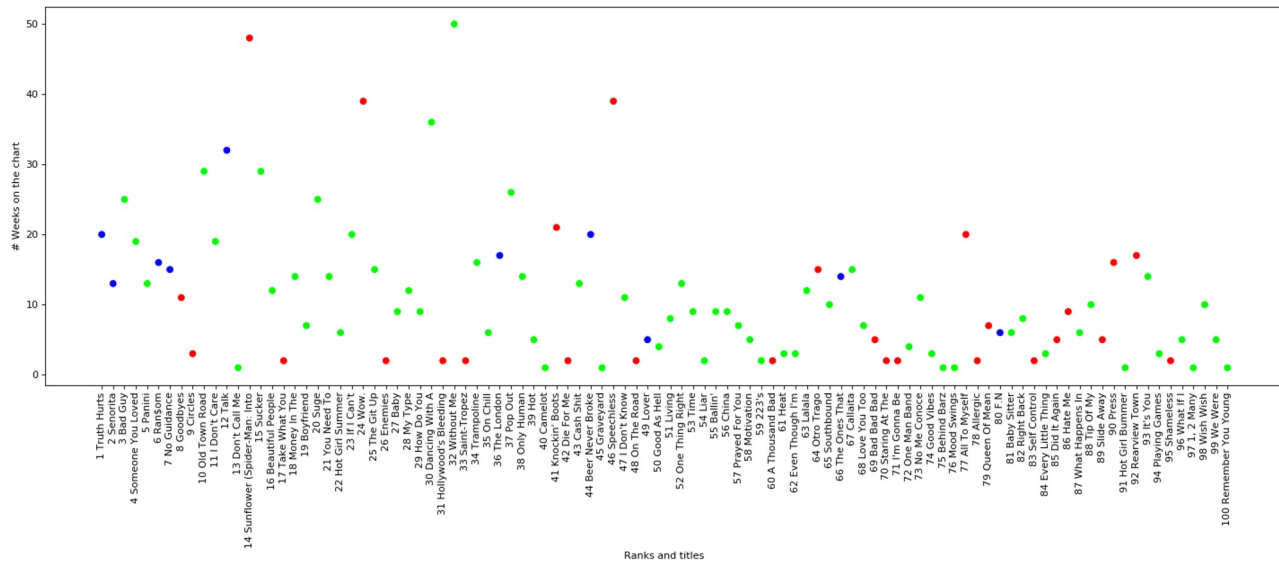


# Plotting with Pandas

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](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