notebook

November 24, 2021

0.1 1. TV, halftime shows, and the Big Game

Whether or not you like football, the Super Bowl is a spectacle. There's a little something for everyone at your Super Bowl party. Drama in the form of blowouts, comebacks, and controversy for the sports fan. There are the ridiculously expensive ads, some hilarious, others gut-wrenching, thought-provoking, and weird. The half-time shows with the biggest musicians in the world, sometimes riding giant mechanical tigers or leaping from the roof of the stadium. It's a show, baby. And in this notebook, we're going to find out how some of the elements of this show interact with each other. After exploring and cleaning our data a little, we're going to answer questions like:

What are the most extreme game outcomes?

How does the game affect television viewership?

How have viewership, TV ratings, and ad cost evolved over time?

Who are the most prolific musicians in terms of halftime show performances?

Left Shark Steals The Show. Katy Perry performing at halftime of Super Bowl XLIX. Photo by Huntley Paton. Attribution-ShareAlike 2.0 Generic (CC BY-SA 2.0).

The dataset we'll use was scraped and polished from Wikipedia. It is made up of three CSV files, one with game data, one with TV data, and one with halftime musician data for all 52 Super Bowls through 2018. Let's take a look, using display() instead of print() since its output is much prettier in Jupyter Notebooks.

[2]:
```
# Import pandas
import pandas as pd

# Load the CSV data into DataFrames
super_bowls = pd.read_csv('datasets/super_bowls.csv')
tv = pd.read_csv('datasets/tv.csv')
halftime_musicians = pd.read_csv('datasets/halftime_musicians.csv')

# Display the first five rows of each DataFrame
display(super_bowls.head())
display(tv.head())
display(halftime_musicians.head())
```

```
         date  super_bowl                    venue            city  \
0  2018-02-04          52        U.S. Bank Stadium      Minneapolis
1  2017-02-05          51              NRG Stadium          Houston
```

```
2  2016-02-07          50                Levi's Stadium      Santa Clara
3  2015-02-01          49  University of Phoenix Stadium         Glendale
4  2014-02-02          48                MetLife Stadium  East Rutherford

        state  attendance           team_winner  winning_pts     qb_winner_1  \
0   Minnesota       67612   Philadelphia Eagles           41      Nick Foles
1       Texas       70807  New England Patriots           34       Tom Brady
2  California       71088        Denver Broncos           24  Peyton Manning
3     Arizona       70288  New England Patriots           28       Tom Brady
4  New Jersey       82529      Seattle Seahawks           43  Russell Wilson

  qb_winner_2    coach_winner            team_loser  losing_pts  \
0         NaN   Doug Pederson  New England Patriots          33
1         NaN  Bill Belichick       Atlanta Falcons          28
2         NaN     Gary Kubiak     Carolina Panthers          10
3         NaN  Bill Belichick      Seattle Seahawks          24
4         NaN    Pete Carroll        Denver Broncos           8

       qb_loser_1 qb_loser_2     coach_loser  combined_pts  difference_pts
0       Tom Brady        NaN  Bill Belichick            74               8
1       Matt Ryan        NaN       Dan Quinn            62               6
2     Cam Newton         NaN      Ron Rivera            34              14
3  Russell Wilson        NaN    Pete Carroll            52               4
4  Peyton Manning        NaN        John Fox            51              35

   super_bowl network  avg_us_viewers  total_us_viewers  rating_household  \
0          52     NBC       103390000               NaN              43.1
1          51     Fox       111319000       172000000.0              45.3
2          50     CBS       111864000       167000000.0              46.6
3          49     NBC       114442000       168000000.0              47.5
4          48     Fox       112191000       167000000.0              46.7

   share_household  rating_18_49  share_18_49  ad_cost
0               68          33.4         78.0  5000000
1               73          37.1         79.0  5000000
2               72          37.7         79.0  5000000
3               71          39.1         79.0  4500000
4               69          39.3         77.0  4000000

   super_bowl                            musician  num_songs
0          52                  Justin Timberlake       11.0
1          52  University of Minnesota Marching Band        1.0
2          51                          Lady Gaga        7.0
3          50                           Coldplay        6.0
4          50                            Beyoncé        3.0
```

0.2 2. Taking note of dataset issues

For the Super Bowl game data, we can see the dataset appears whole except for missing values in the backup quarterback columns (qb_winner_2 and qb_loser_2), which make sense given most starting QBs in the Super Bowl (qb_winner_1 and qb_loser_1) play the entire game.

From the visual inspection of TV and halftime musicians data, there is only one missing value displayed, but I've got a hunch there are more. The Super Bowl goes all the way back to 1967, and the more granular columns (e.g. the number of songs for halftime musicians) probably weren't tracked reliably over time. Wikipedia is great but not perfect.

An inspection of the .info() output for tv and halftime_musicians shows us that there are multiple columns with null values.

[3]:
```
# Summary of the TV data to inspect
tv.info()

print('\n')

# Summary of the halftime musician data to inspect
halftime_musicians.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 53 entries, 0 to 52
Data columns (total 9 columns):
super_bowl          53 non-null int64
network             53 non-null object
avg_us_viewers      53 non-null int64
total_us_viewers    15 non-null float64
rating_household    53 non-null float64
share_household     53 non-null int64
rating_18_49        15 non-null float64
share_18_49         6 non-null float64
ad_cost             53 non-null int64
dtypes: float64(4), int64(4), object(1)
memory usage: 3.8+ KB


<class 'pandas.core.frame.DataFrame'>
RangeIndex: 134 entries, 0 to 133
Data columns (total 3 columns):
super_bowl    134 non-null int64
musician      134 non-null object
num_songs     88 non-null float64
dtypes: float64(1), int64(1), object(1)
memory usage: 3.2+ KB
```

0.3 3. Combined points distribution

For the TV data, the following columns have missing values and a lot of them:

total_us_viewers (amount of U.S. viewers who watched at least some part of the broadcast)

rating_18_49 (average % of U.S. adults 18-49 who live in a household with a TV that were watching for the entire broadcast)

share_18_49 (average % of U.S. adults 18-49 who live in a household with a TV in use that were watching for the entire broadcast)

For the halftime musician data, there are missing numbers of songs performed (num_songs) for about a third of the performances.

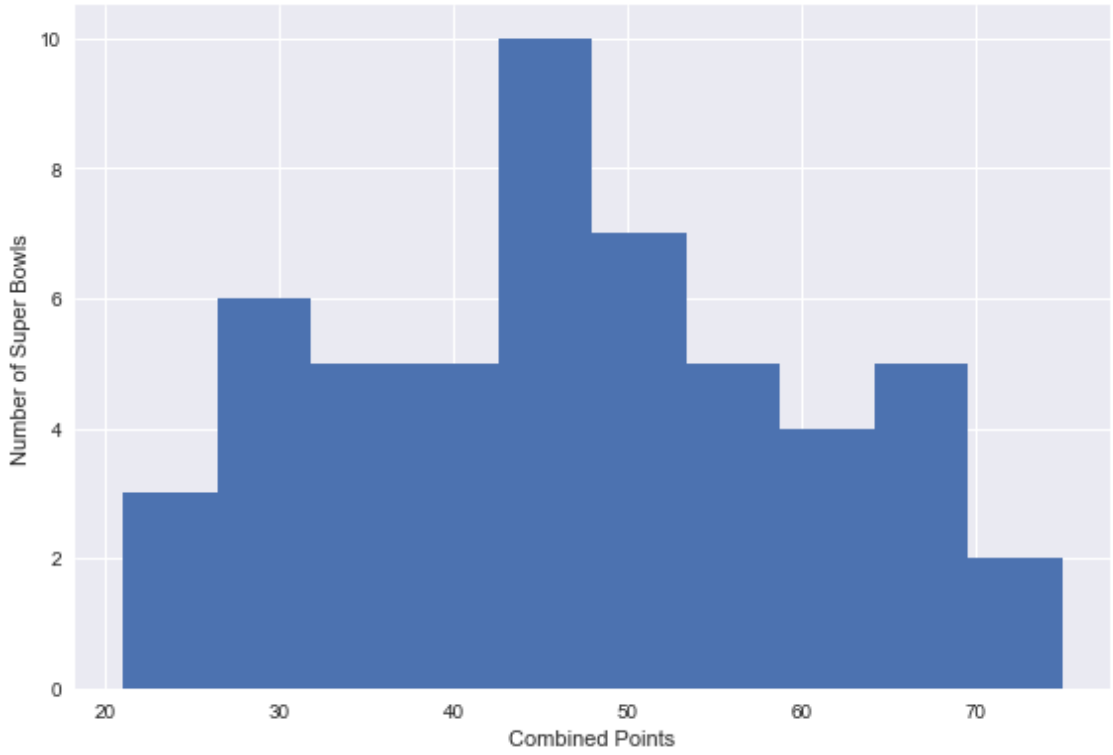
There are a lot of potential reasons for these missing values. Was the data ever tracked? Was it lost in history? Is the research effort to make this data whole worth it? Maybe. Watching every Super Bowl halftime show to get song counts would be pretty fun. But we don't have the time to do that kind of stuff now! Let's take note of where the dataset isn't perfect and start uncovering some insights.

Let's start by looking at combined points for each Super Bowl by visualizing the distribution. Let's also pinpoint the Super Bowls with the highest and lowest scores.

[4]:
```
# Import matplotlib and set plotting style
from matplotlib import pyplot as plt
%matplotlib inline
plt.style.use('seaborn')

# Plot a histogram of combined points
plt.hist(super_bowls['combined_pts'])
plt.xlabel('Combined Points')
plt.ylabel('Number of Super Bowls')
plt.show()

# Display the Super Bowls with the highest and lowest combined scores
display(super_bowls[super_bowls['combined_pts'] > 70])
display(super_bowls[super_bowls['combined_pts'] < 25])
```




```
          date  super_bowl                venue           city       state  \
0   2018-02-04          52    U.S. Bank Stadium    Minneapolis   Minnesota
23  1995-01-29          29   Joe Robbie Stadium  Miami Gardens     Florida

    attendance          team_winner  winning_pts  qb_winner_1 qb_winner_2  \
0        67612  Philadelphia Eagles           41   Nick Foles         NaN
23       74107  San Francisco 49ers           49  Steve Young         NaN

      coach_winner            team_loser  losing_pts      qb_loser_1  \
0    Doug Pederson  New England Patriots          33       Tom Brady
23  George Seifert    San Diego Chargers          26  Stan Humphreys

   qb_loser_2     coach_loser  combined_pts  difference_pts
0         NaN  Bill Belichick            74               8
23        NaN      Bobby Ross            75              23
          date  super_bowl              venue         city       state  \
43  1975-01-12           9     Tulane Stadium  New Orleans   Louisiana
45  1973-01-14           7  Memorial Coliseum  Los Angeles  California
49  1969-01-12           3        Orange Bowl        Miami     Florida

    attendance          team_winner  winning_pts     qb_winner_1 qb_winner_2  \
43       80997  Pittsburgh Steelers           16  Terry Bradshaw         NaN
45       90182       Miami Dolphins           14      Bob Griese         NaN
```

```
49       75389        New York Jets           16      Joe Namath         NaN

   coach_winner           team_loser  losing_pts      qb_loser_1  \
43   Chuck Noll    Minnesota Vikings           6  Fran Tarkenton
45    Don Shula  Washington Redskins           7     Bill Kilmer
49  Weeb Ewbank      Baltimore Colts           7    Earl Morrall

       qb_loser_2   coach_loser  combined_pts  difference_pts
43            NaN     Bud Grant            22              10
45            NaN  George Allen            21               7
49  Johnny Unitas     Don Shula            23               9
```

0.4 4. Point difference distribution

Most combined scores are around 40-50 points, with the extremes being roughly equal distance away in opposite directions. Going up to the highest combined scores at 74 and 75, we find two games featuring dominant quarterback performances. One even happened recently in 2018's Super Bowl LII where Tom Brady's Patriots lost to Nick Foles' underdog Eagles 41-33 for a combined score of 74.

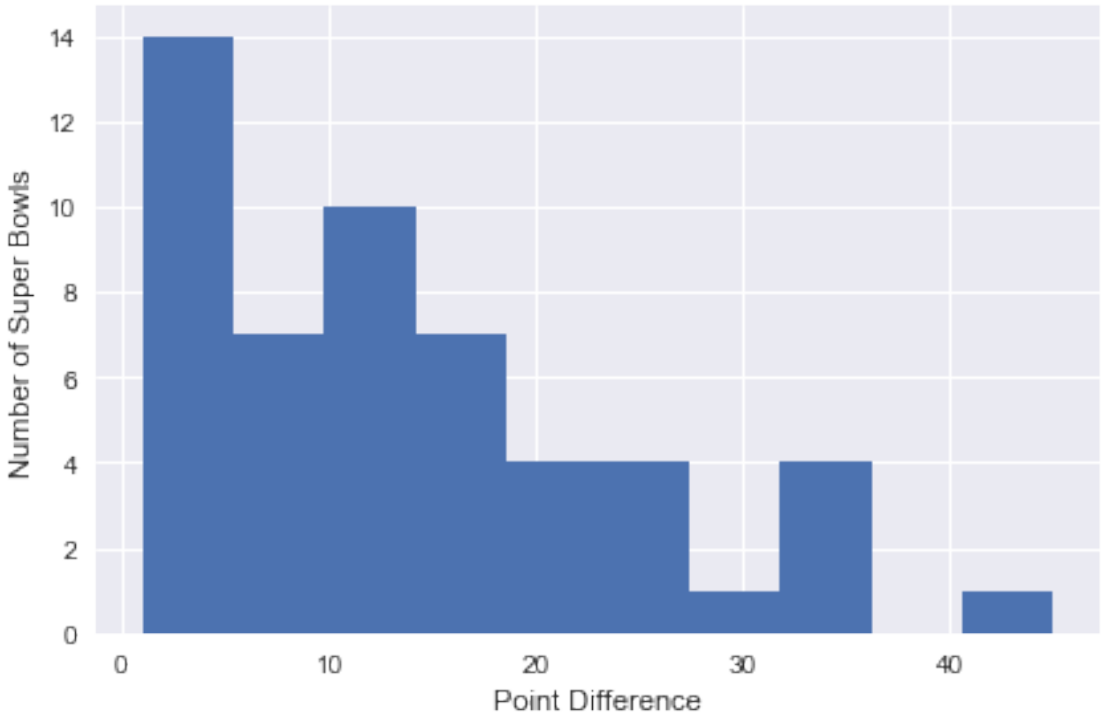
Going down to the lowest combined scores, we have Super Bowl III and VII, which featured tough defenses that dominated. We also have Super Bowl IX in New Orleans in 1975, whose 16-6 score can be attributed to inclement weather. The field was slick from overnight rain, and it was cold at 46 °F (8 °C), making it hard for the Steelers and Vikings to do much offensively. This was the second-coldest Super Bowl ever and the last to be played in inclement weather for over 30 years. The NFL realized people like points, I guess.

UPDATE: In Super Bowl LIII in 2019, the Patriots and Rams broke the record for the lowest-scoring Super Bowl with a combined score of 16 points (13-3 for the Patriots).

Let's take a look at point difference now.

[5]:
```
# Plot a histogram of point differences
plt.hist(super_bowls.difference_pts)
plt.xlabel('Point Difference')
plt.ylabel('Number of Super Bowls')
plt.show()

# Display the closest game(s) and biggest blowouts
display(super_bowls[super_bowls['difference_pts']==1])
display(super_bowls[super_bowls['difference_pts']>=25])
```




```
          date  super_bowl          venue   city    state  attendance  \
27  1991-01-27          25  Tampa Stadium  Tampa  Florida       73813

        team_winner  winning_pts     qb_winner_1 qb_winner_2   coach_winner  \
27  New York Giants           20  Jeff Hostetler         NaN  Bill Parcells

       team_loser  losing_pts qb_loser_1 qb_loser_2 coach_loser  combined_pts  \
27  Buffalo Bills          19  Jim Kelly        NaN   Marv Levy            39

    difference_pts
27               1
```

```
          date  super_bowl                  venue             city  \
4   2014-02-02          48       MetLife Stadium  East Rutherford
15  2003-01-26          37      Qualcomm Stadium        San Diego
17  2001-01-28          35  Raymond James Stadium            Tampa
25  1993-01-31          27             Rose Bowl         Pasadena
28  1990-01-28          24   Louisiana Superdome      New Orleans
30  1988-01-31          22   Jack Murphy Stadium        San Diego
32  1986-01-26          20   Louisiana Superdome      New Orleans
34  1984-01-22          18         Tampa Stadium            Tampa
51  1967-01-15           1     Memorial Coliseum      Los Angeles

         state  attendance           team_winner  winning_pts     qb_winner_1  \
```

```
4   New Jersey       82529      Seattle Seahawks          43  Russell Wilson
15  California       67603  Tampa Bay Buccaneers          48    Brad Johnson
17     Florida       71921      Baltimore Ravens          34    Trent Dilfer
25  California       98374        Dallas Cowboys          52     Troy Aikman
28   Louisiana       72919   San Francisco 49ers          55     Joe Montana
30  California       73302   Washington Redskins          42   Doug Williams
32   Louisiana       73818         Chicago Bears          46     Jim McMahon
34     Florida       72920   Los Angeles Raiders          38    Jim Plunkett
51  California       61946     Green Bay Packers          35      Bart Starr

   qb_winner_2    coach_winner            team_loser  losing_pts  \
4          NaN    Pete Carroll        Denver Broncos           8
15         NaN      Jon Gruden       Oakland Raiders          21
17         NaN   Brian Billick       New York Giants           7
25         NaN   Jimmy Johnson         Buffalo Bills          17
28         NaN  George Seifert        Denver Broncos          10
30         NaN       Joe Gibbs        Denver Broncos          10
32         NaN      Mike Ditka  New England Patriots          10
34         NaN      Tom Flores   Washington Redskins           9
51         NaN  Vince Lombardi    Kansas City Chiefs          10

        qb_loser_1    qb_loser_2    coach_loser  combined_pts  difference_pts
4   Peyton Manning           NaN       John Fox            51              35
15     Rich Gannon           NaN  Bill Callahan            69              27
17   Kerry Collins           NaN     Jim Fassel            41              27
25       Jim Kelly   Frank Reich      Marv Levy            69              35
28      John Elway           NaN     Dan Reeves            65              45
30      John Elway           NaN     Dan Reeves            52              32
32      Tony Eason  Steve Grogan  Raymond Berry            56              36
34   Joe Theismann           NaN      Joe Gibbs            47              29
51      Len Dawson           NaN     Hank Stram            45              25
```

0.5 5. Do blowouts translate to lost viewers?

The vast majority of Super Bowls are close games. Makes sense. Both teams are likely to be deserving if they've made it this far. The closest game ever was when the Buffalo Bills lost to the New York Giants by 1 point in 1991, which was best remembered for Scott Norwood's last-second missed field goal attempt that went wide right, kicking off four Bills Super Bowl losses in a row. Poor Scott. The biggest point discrepancy ever was 45 points (!) where Hall of Famer Joe Montana's led the San Francisco 49ers to victory in 1990, one year before the closest game ever.

I remember watching the Seahawks crush the Broncos by 35 points (43-8) in 2014, which was a boring experience in my opinion. The game was never really close. I'm pretty sure we changed the channel at the end of the third quarter. Let's combine our game data and TV to see if this is a universal phenomenon. Do large point differences translate to lost viewers? We can plot household share (average percentage of U.S. households with a TV in use that were watching for the entire broadcast) vs. point difference to find out.

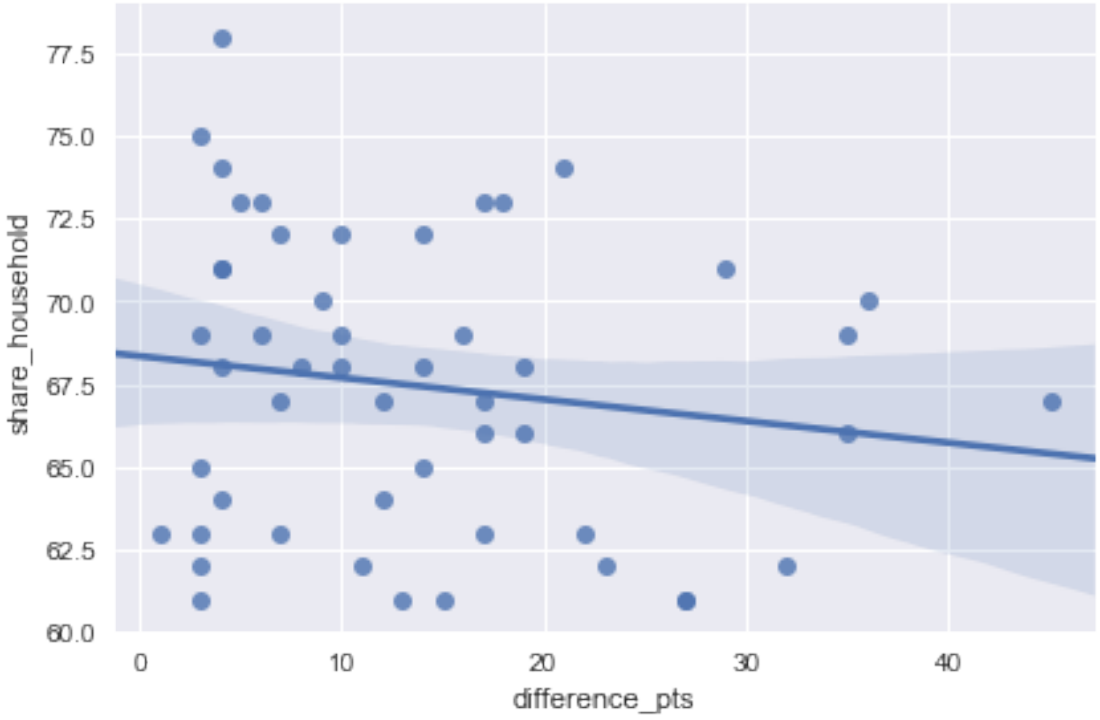
[6]:
```
# Join game and TV data, filtering out SB I because it was split over two␣
↪networks
games_tv = pd.merge(tv[tv['super_bowl'] > 1], super_bowls, on='super_bowl')

import seaborn as sns

# Create a scatter plot with a linear regression model fit
sns.regplot(x= 'difference_pts' , y= 'share_household', data=games_tv)
```

[6]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x7fe4507b67f0>
```

```
/usr/local/lib/python3.6/dist-packages/matplotlib/figure.py:2299: UserWarning:
This figure includes Axes that are not compatible with tight_layout, so results
might be incorrect.
  warnings.warn("This figure includes Axes that are not compatible "
```



0.6 6. Viewership and the ad industry over time

The downward sloping regression line and the 95% confidence interval for that regression suggest that bailing on the game if it is a blowout is common. Though it matches our intuition, we must take it with a grain of salt because the linear relationship in the data is weak due to our small sample size of 52 games.

Regardless of the score though, I bet most people stick it out for the halftime show, which is good

news for the TV networks and advertisers. A 30-second spot costs a pretty $5 million now, but has it always been that way? And how have number of viewers and household ratings trended alongside ad cost? We can find out using line plots that share a "Super Bowl" x-axis.

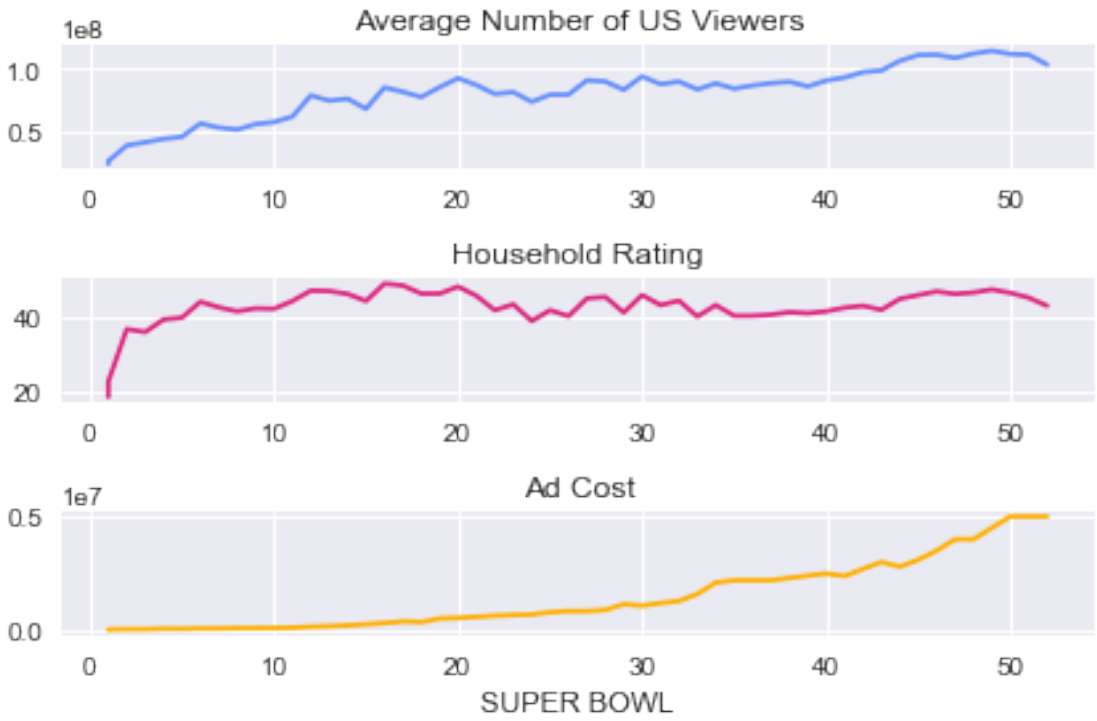
[7]:
```
# Create a figure with 3x1 subplot and activate the top subplot
plt.subplot(3, 1, 1)
plt.plot(tv['super_bowl'], tv['avg_us_viewers'], color= '#648FFF')
plt.title('Average Number of US Viewers')

# Activate the middle subplot
plt.subplot(3, 1, 2)
plt.plot(tv['super_bowl'], tv['rating_household'], color= '#DC267F')
plt.title('Household Rating')

# Activate the bottom subplot
plt.subplot(3, 1, 3)
plt.plot(tv['super_bowl'], tv['ad_cost'], color= '#FFB000')
plt.title('Ad Cost')
plt.xlabel('SUPER BOWL')

# Improve the spacing between subplots
plt.tight_layout()
```

```
/usr/local/lib/python3.6/dist-packages/matplotlib/figure.py:2299: UserWarning:
This figure includes Axes that are not compatible with tight_layout, so results
might be incorrect.
  warnings.warn("This figure includes Axes that are not compatible "
```



0.7 7. Halftime shows weren't always this great

We can see viewers increased before ad costs did. Maybe the networks weren't very data savvy and were slow to react? Makes sense since DataCamp didn't exist back then.

Another hypothesis: maybe halftime shows weren't that good in the earlier years? The modern spectacle of the Super Bowl has a lot to do with the cultural prestige of big halftime acts. I went down a YouTube rabbit hole and it turns out the old ones weren't up to today's standards. Some offenders:

Super Bowl XXVI in 1992: A Frosty The Snowman rap performed by children.

Super Bowl XXIII in 1989: An Elvis impersonator that did magic tricks and didn't even sing one Elvis song.

Super Bowl XXI in 1987: Tap dancing ponies. (Okay, that's pretty awesome actually.)

It turns out Michael Jackson's Super Bowl XXVII performance, one of the most watched events in American TV history, was when the NFL realized the value of Super Bowl airtime and decided they needed to sign big name acts from then on out. The halftime shows before MJ indeed weren't that impressive, which we can see by filtering our halftime_musician data.

[11]:
```
# Display all halftime musicians for Super Bowls up to and including Super Bowl␣
↪XXVII
halftime_musicians[halftime_musicians['super_bowl'] <= 27]
```

[11]:

	super_bowl	musician	num_songs
80	27	Michael Jackson	5.0
81	26	Gloria Estefan	2.0
82	26	University of Minnesota Marching Band	NaN
83	25	New Kids on the Block	2.0
84	24	Pete Fountain	1.0
85	24	Doug Kershaw	1.0
86	24	Irma Thomas	1.0
87	24	Pride of Nicholls Marching Band	NaN
88	24	The Human Jukebox	NaN
89	24	Pride of Acadiana	NaN
90	23	Elvis Presto	7.0
91	22	Chubby Checker	2.0
92	22	San Diego State University Marching Aztecs	NaN
93	22	Spirit of Troy	NaN
94	21	Grambling State University Tiger Marching Band	8.0
95	21	Spirit of Troy	8.0
96	20	Up with People	NaN
97	19	Tops In Blue	NaN
98	18	The University of Florida Fightin' Gator March…	7.0
99	18	The Florida State University Marching Chiefs	7.0
100	17	Los Angeles Unified School District All City H…	NaN
101	16	Up with People	NaN
102	15	The Human Jukebox	NaN
103	15	Helen O'Connell	NaN
104	14	Up with People	NaN
105	14	Grambling State University Tiger Marching Band	NaN
106	13	Ken Hamilton	NaN
107	13	Gramacks	NaN
108	12	Tyler Junior College Apache Band	NaN
109	12	Pete Fountain	NaN
110	12	Al Hirt	NaN
111	11	Los Angeles Unified School District All City H…	NaN
112	10	Up with People	NaN
113	9	Mercer Ellington	NaN
114	9	Grambling State University Tiger Marching Band	NaN
115	8	University of Texas Longhorn Band	NaN
116	8	Judy Mallett	NaN
117	7	University of Michigan Marching Band	NaN
118	7	Woody Herman	NaN
119	7	Andy Williams	NaN
120	6	Ella Fitzgerald	NaN
121	6	Carol Channing	NaN
122	6	Al Hirt	NaN
123	6	United States Air Force Academy Cadet Chorale	NaN
124	5	Southeast Missouri State Marching Band	NaN
125	4	Marguerite Piazza	NaN

```
126           4                                    Doc Severinsen        NaN
127           4                                         Al Hirt          NaN
128           4                                The Human Jukebox         NaN
129           3      Florida A&M University Marching 100 Band            NaN
130           2  Grambling State University Tiger Marching Band          NaN
131           1   University of Arizona Symphonic Marching Band          NaN
132           1  Grambling State University Tiger Marching Band          NaN
133           1                                         Al Hirt          NaN
```

0.8 8. Who has the most halftime show appearances?

Lots of marching bands. American jazz clarinetist Pete Fountain. Miss Texas 1973 playing a violin. Nothing against those performers, they're just simply not Beyoncé. To be fair, no one is.

Let's see all of the musicians that have done more than one halftime show, including their performance counts.

[15]:
```
# Count halftime show appearances for each musician and sort them from most to␣
↪least
halftime_appearances = halftime_musicians.groupby('musician').
↪count()['super_bowl'].reset_index()
halftime_appearances = halftime_appearances.sort_values('super_bowl',␣
↪ascending=False)

# Display musicians with more than one halftime show appearance
halftime_appearances[halftime_appearances['super_bowl']>1]
```

[15]:
```
                                        musician  super_bowl
28      Grambling State University Tiger Marching Band           6
104                                 Up with People           4
1                                        Al Hirt           4
83                               The Human Jukebox           3
76                                  Spirit of Troy           2
25           Florida A&M University Marching 100 Band           2
26                                  Gloria Estefan           2
102            University of Minnesota Marching Band           2
10                                     Bruno Mars           2
64                                  Pete Fountain           2
5                                         Beyoncé           2
36                               Justin Timberlake           2
57                                          Nelly           2
44   Los Angeles Unified School District All City H…           2
```

0.9 9. Who performed the most songs in a halftime show?

The world famous Grambling State University Tiger Marching Band takes the crown with six appearances. Beyoncé, Justin Timberlake, Nelly, and Bruno Mars are the only post-Y2K musicians with multiple appearances (two each).

From our previous inspections, the num_songs column has lots of missing values:

A lot of the marching bands don't have num_songs entries.

For non-marching bands, missing data starts occurring at Super Bowl XX.

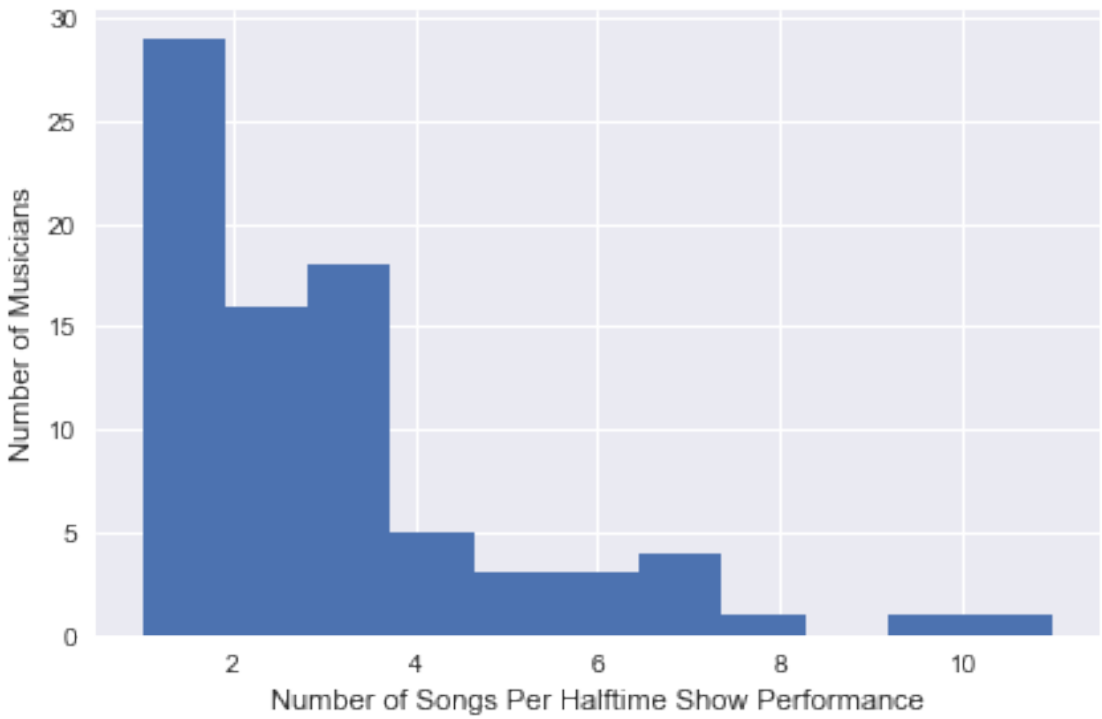
Let's filter out marching bands by filtering out musicians with the word "Marching" in them and the word "Spirit" (a common naming convention for marching bands is "Spirit of [something]"). Then we'll filter for Super Bowls after Super Bowl XX to address the missing data issue, then let's see who has the most number of songs.

[16]:
```
# Filter out most marching bands
no_bands = halftime_musicians[~halftime_musicians.musician.str.
 ↪contains('Marching')]
no_bands = no_bands[~no_bands.musician.str.contains('Spirit')]

# Plot a histogram of number of songs per performance
most_songs = int(max(no_bands['num_songs'].values))
plt.hist(no_bands.num_songs.dropna(), bins = most_songs)
plt.xlabel('Number of Songs Per Halftime Show Performance')
plt.ylabel('Number of Musicians')
plt.show()

# Sort the non-band musicians by number of songs per appearance...
no_bands = no_bands.sort_values('num_songs', ascending=False)
# ...and display the top 15
display(no_bands.head(15))
```

```
/usr/local/lib/python3.6/dist-packages/matplotlib/figure.py:2299: UserWarning:
This figure includes Axes that are not compatible with tight_layout, so results
might be incorrect.
  warnings.warn("This figure includes Axes that are not compatible "
```



	super_bowl	musician	num_songs
0	52	Justin Timberlake	11.0
70	30	Diana Ross	10.0
10	49	Katy Perry	8.0
2	51	Lady Gaga	7.0
90	23	Elvis Presto	7.0
33	41	Prince	7.0
16	47	Beyoncé	7.0
14	48	Bruno Mars	6.0
3	50	Coldplay	6.0
25	45	The Black Eyed Peas	6.0
20	46	Madonna	5.0
30	44	The Who	5.0
80	27	Michael Jackson	5.0
64	32	The Temptations	4.0
36	39	Paul McCartney	4.0

0.10 10. Conclusion

So most non-band musicians do 1-3 songs per halftime show. It's important to note that the duration of the halftime show is fixed (roughly 12 minutes) so songs per performance is more a measure of how many hit songs you have. JT went off in 2018, wow. 11 songs! Diana Ross comes in second with 10 in her medley in 1996.

In this notebook, we loaded, cleaned, then explored Super Bowl game, television, and halftime

show data. We visualized the distributions of combined points, point differences, and halftime show performances using histograms. We used line plots to see how ad cost increases lagged behind viewership increases. And we discovered that blowouts do appear to lead to a drop in viewers.

This year's Big Game will be here before you know it. Who do you think will win Super Bowl LIII?

UPDATE: Spoiler alert.

[ ]:
```
# 2018-2019 conference champions
patriots = 'New England Patriots'
rams = 'Los Angeles Rams'

# Who will win Super Bowl LIII?
super_bowl_LIII_winner = ...
print('The winner of Super Bowl LIII will be the', super_bowl_LIII_winner)
```