Instruction

1) Please describe your experience designing/implementing data visualizations and animations of the visualizations. How many years of experience do you have? How often do you create visualizations and animations?

- I've been implementing visualizations since I started my visualization research (4 years or so). Mainly implementations were for study purpose; use it as study stimuli to answer research questions that I am interested in. I've implemented Hypothetical Outcome Plots (HOPs) for a couple of times to study the effect of them.

Here are the different stages of visualization
LINK (ANONYMIZED TO GET REVIEW)
(The marks represent the house price data in SF and NY. First plot shows the elevation of the houses in two regions, The second plot shows the elevation vs. price per sqft.)

Imagine that you're an animation designer such that you want to design the animation for the transitions between the stages.

2) Please explain how you're going to animate the ***graphical components*** of the visualization with the ***timing information***?

0->1: SF first, and NY later. In each city, animate one line at a time from the bottom lines to the top lines.
1->2: Transfer lines to dots first, move the dot to the location corresponding to its $ per sqft. Then animate the boxes to emphasize unique data points for each city
2->3: Shrink the vis 2 to position first in the grid, then expand more vis related to each dimensions ($ per sqft, and sqft) then show other columns.

3) Could you think another animation design?

(You are free to assume: more/less number of data, shorter/longer animation time, different data distributions, the different number of cardinality (the number of categories), or the different message/task that you want to convey through the transition.)

0->1: annimate sf and ny at the same time from the bottom to the top to emphasize the difference between two distributions
1->2: no changes
2->3: choose one axis (likely $ per sqft) and expand that column first, then expand row from the bottom to promote reasoning with that specific column.

Here is one version of the animation for the transitions.
LINK (ANONYMIZED TO GET REVIEW)

4) Please list the changes of the visualization ***graphic components*** along with the ***timing information***.

0->1: animate to position ny and sf data at the same time but each data point at a time. As more data point comes, the axis changes to accommodate the new data points

1->2: translate lines to dots and animate the position to the corresponding elevation then boxes for sf and ny appear at the same time (ny from left to right, sf from bottom to top)

2->3: animate the data point for sf first, then ny later to the grid, then sequentially show visualizations for the related x-axis and y-axis (recursively show other vis not primarily related to the first two dimensions as well) with the order of sf and ny.