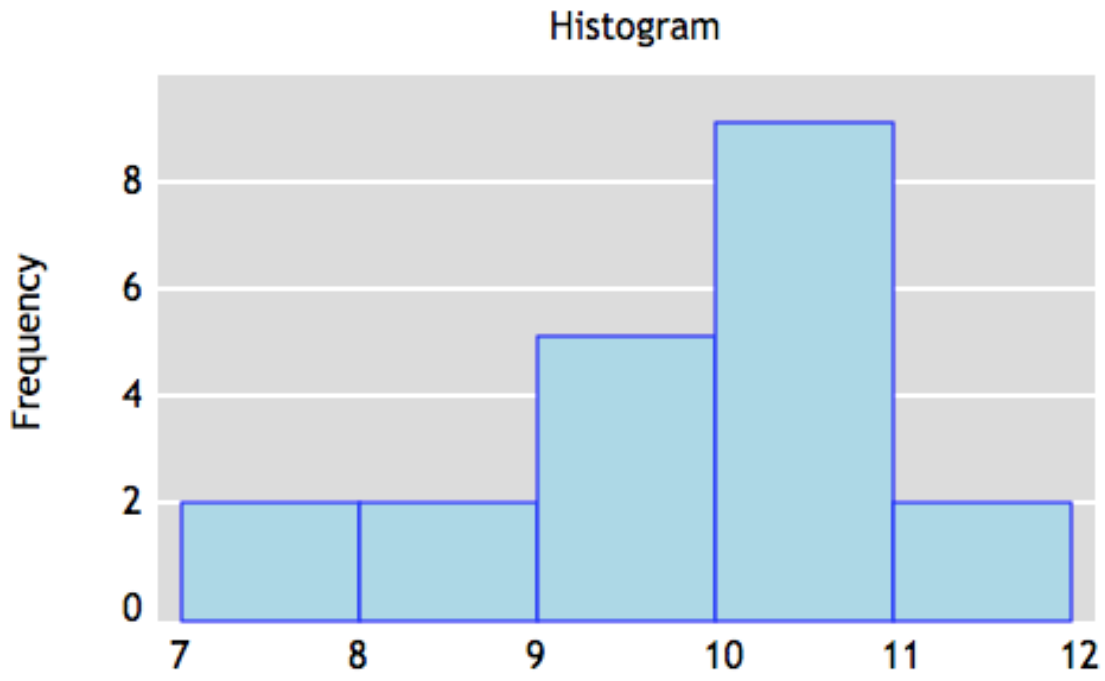
Question 1

Use CSS and SVG only (no D3) to draw a histogram, such as the one below.



Notes:

- Use classes and an internal style sheet to style the bars and the gridlines.
- Remember that a histogram has no spaces between the bars and the frequency counts must be integers.
- The background color only appears in the plot area, not in the axis areas.
- The gridlines are behind the bars.
- The shape of the histogram, quantities, and colors are up to you.
- Make sure your graph has a title and y-axis label.

Template: Hmk4-Q1.html
(For the record, this is the only time you will have to write your own SVG in this class!)

Question 2

Make a copy of your completed Hmk4-Q1.html and name it Hmk4-Q2.html.
Add a script in the body section of the file that uses D3 to do the following:
a) Change the color of all text to blue.
b) Change the fill color all of the bars in your histogram to lightgreen (leaving the background plot fill as is).
c) Simultaneously transition one of the bars up and another down over a 2 second interval.
Demo: Hmk4-hist_transition.mov
Click to view undefined
d) Add interactivity so that mousing over a bar changes its fill color, and mousing out turns it back to lightgreen.
Demo: Hmk4-hist_hover.mov

Question 3

Begin the analysis of **one** variable in the dataset you are using the final project. As this is an individual homework assignment, each group member should choose a *different* variable. Choose three visualizations as appropriate to show the distribution of the variable, conditioned on another variable if desired (for example, the distribution of income by region). Write a few sentences describing what you found and what new questions your visualizations have generated. (Faceted graphs count as one graph; graphs put together with grid.arrange() or similar count as multiple graphs.)