Get some CSV-based data from here or here or elsewhere
- if the data is too big you can down-sample it

Your D3-based visual interface should be able to (all 10 pts):
1. pick a variable and bin it into a fixed range (equi-width) of your choice
2. create a bar chart of the variable you picked in 1.
3. using a menu, allow users to select a new variable and update chart
4. only on mouse-over display the value of the bar on top of the bar
5. on mouse-over make the bar wider and higher to focus on it
6. on mouse-click transform the bar chart into a pie chart (and back)
7. mouse moves left (right) should decrease (increase) bin width/size

An additional 10 pts for elegant implementation/function

Extra credit (10 pts):
- on mouse-click create a force-directed layout using a chosen distance

Submission on SBU HotCRP (see email)
Due Tuesday, Feb. 14, 2016
Deliverables

You need to upload the following by the due date

- 2-3 page report with illustrated description of your program’s capabilities and implementation detail
- add code snippets to show how you did things
- mpeg or avi video file that shows all features of your software in action
- **important:** do not reveal your identity on the submission itself (to enable double-blind peer feedback)

Grading

- TA will pick students at random for thorough code review sessions
- you better know your code !!!
- so, please do not just copy code beyond the D3 templates
- or even worse, videotape someone else’s program
Aka, cheating

Discussion with your class mates (but not others) is OK

Cut and paste from any source is **not** OK
  - any suspected activity of this kind will result in zero points
  - also for the person providing the original
  - two-strikes and out rule is in effect (including an academic misconduct report)
  - this includes any feeble attempt to cover the tracks somehow

Stay honest and resist the temptation!