CMM262 / BGGN262 Midterm Exam 2018

Part 2: Short answer questions.

Email Questions and final answers to Patrick: pfiaux@ucsd.edu

1. In the data wrangling section, we used a log-scale to transform the points and then plot them.
   1. Why did we transform the points in the first place, what is the advantage of doing so?
   2. Why did we not simply divide by a large number, or would that also work for our purposes?
2. Manhattan plots:
   1. What do the two axis of Manhattan plots usually represent.
   2. The Y-axis usually represents a transformation of a raw score. What does the transformation do?
   3. In what field of Biology are Manhattan plots often used and what do they try to convey
3. Volcano plots:
   1. What do the two axis of a Volcano plot represent
   2. What scientific question does a Volcano plot visually address
   3. What in class processed data would be most fit to display in a Volcano plot
   4. Bonus Question 1: Take that data and create a volcano plot from it (attach code and plot directly to the word document)
   5. Bonus Question 2: Give the points meaningful color, explain why you colored them the way you did. Add proper axis label and title of the plot