Exercise 10 - Analysis and plotting

###Complete the tasks below and submit your results via a pull request on GitHub by the beginning of tutorial next Friday.

To begin this week, fork the TA's Exercise 9 Github repo. Clone the forked repo so that you have the required files. Be sure to commit regularly to show how you arrived at your solutions.

1. Find some data on two variables that you would expect to be related to each other. These data can come from your own research, your daily life, or the internet. Enter those data into a text file or Excel and then save a text file, and write a script that loads this text file and produces a scatter plot of those two variables that includes a trend line.

2. Given the data in "data.txt". Write a script that generates two figures that sumamrize the data. First, show a barplot of the means of the four populations. Second, show a scatter plot of all of the observations. You may want to "jitter" the points (`geom_jitter()`) to make it easier to see all of the observations within a population in your scatter plot. Alternatively, you could also try setting the `alpha` argument in `geom_scatterplot()` to 0.1. Do the bar and scatter plots tell you different stories? Why?

##Turning in your assignment via GitHub

Once you have committed all changes to your local Git repo and pushed all of those commits to the forked repo on GitHub, you can "turn in" your assignment using a `pull request`. This can be done from the GitHub repo website. When viewing the forked repo, select "Pull requests" in the upper middle of the screen, then click the green "New pull request" button in the upper right. You'll then see a screen with a history of commits for you and your collaborator, select the green "Create pull request button". In the text box next to your user icon near the top of the page, remove whatever text is there and add "last name submission", but obviously substitute your last names. Then click the green "Create pull request" button.