COP 4020 – Test 3 – Fall 2018 Name:

For this test, you will submit a single .r source code named Test3Code.r file to the webcourse. Download and use the files that are on the webcourse in the files section named test3data.csv, cherry.csv, and Future-500.csv (all contained in test3.zip).

1. (40 pts) Start by normalizing the data in test3data. Either fill in missing values, or delete rows if industry is missing. Make sure you fill in any missing states and cities (among other columns) if possible. Find the median of all the profit columns where month is 6. Note, too, that the City and State columns will be loaded in as **factors** and you might need to change them to **character** before filling in missing data.

2. (30 pts) Graph the data from cherry.csv with a barplot Height vs Volume. Please note that each of these should have a different color with a legend, otherwise it will be impossible to tell the difference. Describe the graph as discussed in class in your source code.

3. (30 pts) Graph the data from cherry.csv with a plot Height vs Volume. Generate a linear regression of Height vs Volume, and use an abline to show it.