Professor McDonald
FNCE 5352 – Financial Programming and Modeling
January 26, 2021
ggplot2, Git & SQL Class Notes

ggplot2

https://stats.idre.ucla.edu/stat/data/intro_ggplot2_int/ggplot2_intro_interactive.html#(1)

https://rstudio.com/wp-content/uploads/2015/03/ggplot2-cheatsheet.pdf

GIT

See Slides in class Repo

SQL

What is a Relational Database

A relational database is a collection of data items with pre-defined relationships between them. These items are organized as a set of tables with columns and rows. Tables are used to hold information about the objects to be represented in the database. Each column in a table holds a certain kind of data and a field stores the actual value of an attribute. The rows in the table represent a collection of related values of one object or entity. Each row in a table could be marked with a unique identifier called a primary key, and rows among multiple tables can be made related using foreign keys. This data can be accessed in many different ways without reorganizing the database tables themselves. (https://aws.amazon.com/relational-database/)

Cheat Sheets:

Below are the cheat sheets I used in class to help describe SQL

http://files.zeroturnaround.com/pdf/zt_sql_cheat_sheet.pdf

Try it out:

This is the website that allows you to execute SQL statements against an imaginary customer/orders database:

https://www.w3schools.com/sql/trysql.asp?filename=trysql_select_all

Topics covered:

Below is a list of topic I covered in class.

1) Ggplot2
2) GIT
3) Relational database
    a. What is it
4) Select
    a. Fields
    b. aliases
5) From
6) Where
    a. =
    b. Between
    c. In ()
7) Group by
8) Having
9) Joins
    a. Inner
    b. Left
    c. Right
    d. Full
10) Subqueries
11) Accessing a database with R
    a. RODBC
    b. https://gist.github.com/tgh0831/6379253fd6d82671005127a843456aaa