Lab 1

Jack Flitcroft

CS3860

Major Steps:

Importing data into database –

It took a bit for me to get a handle of connecting to the server through the command prompt, I found that opening the SQL CMD prompt was much easier. I also realized I had to type in USE [Database] and choose the Db to connect to, so having that in the lab would help as I had to lookup the error. Opening Gene\_info in excel wasn’t difficult, and creating the table using the script in the lab writeup was simple as well. I have worked with databases for the past 4 months at my job, so I am very familiar with this process.

A picture containing table, phone

Description automatically generated

I did find it nice to learn how to do this in the command prompt however.

A close up of a screen

Description automatically generated

Loading the data was not too difficult either, I needed to make sure my file structure was correct is all.

A picture containing indoor, sitting, pizza, table

Description automatically generated

I ended up getting every error that was on the PDF while trying to load the data. Running the cmd prompt in admin mode fixed it.

After loading the data, I got the correct warnings:

A screenshot of a computer

Description automatically generated

After dropping this table, I created the next one using the larger file, miraculously I got 0 errors or warnings!

A screenshot of a computer

Description automatically generated

Primary Keys and Indexes –

I ran the primary key part in the GUI which was a mistake as it timed out and I had to rebuild the table, however it ended up working nicely!

Below is a screenshot of the time before running the key to grab a specific piece of data:

A screenshot of a computer

Description automatically generated

Then when grabbing this on the GUI I get the following screenshot:

A screenshot of a cell phone

Description automatically generated

What I have learned from this Lab:

Personally, the most I got out of this was using MySQL as I have not used that particular database system before and learning how to setup a database from a command line. I thought that part was particularly neat. I have worked for Baird for roughly 4 months now, and a lot of what I have done is database management, so I found this to be interesting in how you create one. I will say, it was a bit annoying to get those constant errors and having to reload the table a few times was a real pain. I work in Microsoft SQL Management Studio which seems much more top of the line compared to MySQL, of course because it costs money, but I wasn’t used to those errors. Overall, I think I learned a lot!

How this could be improved:

I will say there are only two things that come to mind. First, I like the idea of having one script having a space missing that gives an error, as I think students will learn, but it was in almost every script and took a bit of time to find that. Although it wasn’t bad, just a piece of input for the future, I guess. The second thing I would suggest is when connecting to a database the PDF does not say to type “USE genomics” and I and a few other students ran into problems with that. I used the error message to figure it out, but in the future having that on the write up would be helpful.

ERD: