**Name**: Viv Huang

**Describe the challenges you encountered in loading the data and how did you solve the**

**issues you encountered:**

1. When I tried to load data from the csv file into database table:

#DatabaseError: 1366 (HY000): Incorrect decimal value: ' Media Specialist Assoc."' for column 'fte' at row 15

I checked the row with error: because primary\_job column’s data at row 15 is “School Librarian, Media Specialist Assoc.” and there is a comma inside, so MySQL thought it was a field termination sign. As a result, MySQL put “Media Specialist Assoc.” into fte column. However, fte column can only accept decimal values, so the error occurred. I solved this problem by adding OPTIONALLY ENCLOSED BY '"' after FIELDS TERMINATED BY ','.

1. After adding OPTIONALLY ENCLOSED BY '"' after FIELDS TERMINATED BY ',', there was a new issue:

SyntaxError: unexpected character after line continuation character

It was because the double quote in this part: OPTIONALLY ENCLOSED BY '"' ended the SQLCMD string. I solved this problem by using a triple-quoted string to avoid having to escape the quotes altogether:

SQLCMD = """LOAD DATA INFILE '/Users/vivhuang/MySQLfiles/nj\_state\_teachers\_salaries.csv'

INTO TABLE nj\_state\_teachers\_salaries.nj\_state\_teachers\_salaries

FIELDS TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"'

LINES TERMINATED BY '\n'

IGNORE 1 ROWS"""

1. Next, when I ran: mycursor.execute(SQLCMD), a new issue occurred:

DatabaseError: 1366 (HY000): Incorrect integer value: '' for column 'experience\_district' at row 220

I checked row 220 and found that columns experience\_district, experience\_nj and experience\_total are empty in this row. I solved this problem by changing MySQL’s configuration file my.cnf using nano text editor: nano my.cnf, then added sql-mode="" to the configuration file. And then I restarted MySQL server to make it take effect.

**Add OPTIONALLY ENCLOSED BY '"' in your SQL command when loading the data from**

**the CSV file to the MySQL database. Did you observe any differences with and without it?**

Yes, definitely. Without OPTIONALLY ENCLOSED BY '"', we cannot even load data from csv file

into the database as explained in the previous section. With OPTIONALLY ENCLOSED BY '"',

we can load “School Librarian, Media Specialist Assoc.” as one column.