CS 157A Spring 2020   **Project 1**

Point: 10

Instructions:

1. Due Date: April 6th, 2020
2. Can be done individually or as Team of at most 3 students
3. Only one student needs to submit the project with the names of team members
4. Project submission includes source code file which was changed to implement the solution to given problem statement and project report should explains the process (research, code changes, build process)
5. Download source code from SQLite website
6. Read custom build steps from SQLite website

Problem Statement:

First take a look at the following SQLITE3 shell - SQL commands and responses:
sqlite> create table t1(c1 int, c2 char(20), c3 int, c4 int);
sqlite> insert into t1 values(1,'cs157a',80);
Error: table t1 has 4 columns but 3 values were supplied

We created a new table (t1) with 4 columns, then we tried to insert a new tuple into this table but only 3 values were specified instead of 4 values. This led to the error "Error: table t1 has 4 columns but 3 values were supplied". It will be helpful, if this error message can provide more information e.g. schema of the table.

So, in this project you have to make the change to SQLite source code so that the response to such user error looks like:

sqlite> insert into t1 values(1,'cs157a',80);
Metadata help: t1{c1,c2,c3,c4}
Error: table t1 has 4 columns but 3 values were supplied