Users/Roles/Permissions

(Save as **lis3781_permissions.sql**, using a text editor, do ***not*** use MS Word.)

The following items are *required* (use Secure Shell or Terminal):

A. Original tables and insert statements.
B. Include indexes and foreign key code (see below).
C. **Include *<u>All</u>*** table create and populate statements, query result sets, as well as grant statements in one file: **lis3781_permissions.sql**

1. **<u>Using MySQL Client and SQL ONLY</u>**, **<u>NOT</u>** MySQL Workbench:
2. Create **lis3781** database, create two tables: **company** and **customer**
    a. Use 1:M relationship: **company** is <u>parent</u> table
    b. See example: **create_region_store.sql**
    c. **company** attributes:
        i. cmp_id (pk)
        ii. cmp_type enum('C-Corp','S-Corp','Non-Profit-Corp','LLC','Partnership')
        iii. cmp_street
        iv. cmp_city
        v. cmp_state
        vi. cmp_zip (zf)
        vii. cmp_phone
        viii. cmp_ytd_sales
        ix. cmp_url
        x. cmp_notes
    d. **customer** attributes:
        i. cus_id (pk)
        ii. cmp_id (fk)
        iii. cus_ssn (ux), (zf)
        iv. cus_type enum('Loyal','Discount','Impulse','Need-Based','Wandering')
        v. cus_first
        vi. cus_last
        vii. cus_street
        viii. cus_city
        ix. cus_state
        x. cus_zip (zf)
        xi. cus_phone
        xii. cus_email
        xiii. cus_balance
        xiv. cus_tot_sales
        xv. cus_notes
    e. Create suitable indexes **<u>and</u>** foreign keys (**Enforcing_PK_FK_Relationship.pdf**).
    f. Enforce pk/fk relationship: **on update cascade, on delete restrict**

Users/Roles/Permissions:

Create two different users (user3 and user4), with two different passwords, both users can access from **localhost** only.

See example: **MySQL_Installation_Admin_Brief.pdf**

1. Limit **user3** to select, update, and delete privileges on company and customer tables
2. Limit **user4** to select, and insert privileges on customer table

Log into server as each user:

3. Verify database/table permissions, show grants:
    a. you/admin
    b. user3
    c. user4
4. display current user (**user4**) and MySQL version
5. list tables (as admin)
6. display structures for both tables
    a. company
    b. customer
7. display data for both tables:
    a. company
    b. customer
8. Display query result set of customer table, including modified fk, by updating pk in parent table (company), change pk value from 1 to 6. Copy and paste SQL commands and query result sets displaying change:
9. Display the SQL statement(s), and query result set that prevented the parent table (company) from deleting a record w/o deleting the associated child table (customer) records first. Include delete statement, and resulting error.
10. Log in as **user3**:
    a. show the SQL INSERT statement, **and** corresponding query result set that prevented user3 from inserting data in the company table
    b. show the SQL INSERT statement, **and** corresponding query result set that prevented user3 from inserting data in the customer table
11. Log in as **user4**:
    a. show the SQL statement, **and** corresponding query result set that prevented user4 from "seeing" company table:
    b. same as above, though, prevented from being able to delete from the customer table:
12. Log in as **admin**: remove both tables (structure and data), and show commands: