CIT 225 Lab1 Instructions

1. Run the create\_truck\_user.sql script. Verify that the truck database now exists.
2. Create a connection within SQL Developer to the truck database. Call the connection “truck”.
3. Run the lab1.sql script and familiarize yourself with the tables that are created in the truck database.
   1. Verify that the tables have data.
   2. Open lab1.log and verify that there are no errors.
4. Open the create\_truck\_tables.sql script and familiarize yourself with the tables, constraints, sequences, and indexes produced by this script.
5. Open the truck\_inserts.sql script and familiarize yourself with the data being inserted.

Perform the following steps inside of the lab1.sql script:

1. Create a new table called ‘maintenance’. This table will keep track of mechanical maintenance performed on the company’s trucks.
   1. It should have these columns:
   2. 
   3. Choose appropriate data types for the columns.
   4. Create Primary and Foreign Key constraints as necessary.
   5. Create a Check constraint on the ‘type’ column allowing only two values: ‘Brake Inspection’ and ‘LOF’
   6. Create a sequence object for the maintenance table called maintenance\_s1
   7. Identify a natural key and create a Unique Index to enforce this natural key.
2. Add two rows to the maintenance table:
   1. Row 1
      1. maintenance\_date = ’19-Nov-2016’
      2. type = ‘LOF’
      3. notes = null
      4. vehicle\_id that corresponds to vehicle name = ‘Mad Max’
      5. employee\_id that corresponds to employee first\_name = ‘Mike’
   2. Row 2
      1. maintenance\_date = ’24-Nov-2016’
      2. type = ‘Brake Inspection’
      3. notes = null
      4. vehicle\_id that corresponds to vehicle name = ‘Classy Cat’
      5. employee\_id that corresponds to employee first\_name = ‘Mike’
3. Create a new table called ‘incident’. This table will keep track of incidents such as accidents and speeding tickets.
   1. It should have these columns:
   2. 
   3. Choose appropriate date types for the columns.
   4. Create Primary and Foreign Key constraints as necessary.
   5. Create a Check constraint on the ‘type’ column allowing only three values: ‘Overweight’, ‘Speeding’, ‘Accident’
   6. Create a sequence object for the incident table called incident\_s1
   7. Identify a natural key and create a Unique Index to enforce this natural key.
4. Add one row to the incident table:
   1. Incident\_date = ’28-Dec-2016’
   2. Type = ‘Overweight’
   3. Employee\_id that corresponds to employee first\_name = ‘Matt’
   4. Vehicle\_id that corresponds to vehicle name = ‘Classy Cat’
5. Create a new table called ‘drugtest’. This table will track the results of drug tests administered to commercial drivers as required by law.
   1. It should have these columns:
   2. 
   3. Choose appropriate date types for the columns.
   4. Create Primary and Foreign Key constraints as necessary.
   5. Create a Check constraint on the ‘results’ column allowing only three values: ‘Pending’, ‘Pass’, ‘Fail’
   6. Create a sequence object for the drugtest table called drugtest\_s1
   7. Identify a natural key and create a Unique Index to enforce this natural key.
6. Add ‘San Francisco’ with a code of ‘SFO’ to the city table.
7. Add the following distances to the milage table:
   1. 
   2. You should use .CURRVAL in these inserts to get the proper foreign key value for the city2 column.
8. Change the Check constraint on the maintenance table to include ‘Tire Inspection’ as another value option.
9. Change the Check constraint on the incident table to include ‘Sleep Log’ as another value option.
10. Add a NOT NULL constraint to the phone column in the client table.
11. Rename the fire\_date column in employee table to termination\_date.