

## **ITSE 2309 – Database Programming: Oracle**

### **Lab 6 – Restricting Rows and Sorting Data; Additional Database Objects**

To perform the following assignments, refer to the tables in the JustLee Books database.

1. Create a sequence for populating the Customer# column of the CUSTOMERS table. When setting the start and increment values, keep in mind that data already exists in this table. The options should be set to not cycle the values and not cache any values, and no minimum or maximum values should be declared.
2. Add a new customer row by using the sequence created in Question 1. The only data currently available for the customer is as follows: last name = Shoulders, first name = Frank, and zip = 23567.
3. Create a sequence that generates integers starting with the value 5. Each value should be three less than the previous value generated. The lowest possible value should be 0, and the sequence shouldn't be allowed to cycle. Name the sequence MY\_FIRST\_SEQ.
4. Issue a SELECT statement that displays NEXTVAL for MY\_FIRST\_SEQ three times. Because the value isn't being placed in a table, use the DUAL table in the FROM clause of the SELECT statement. What causes the error on the third SELECT?
5. Change the setting of MY\_FIRST\_SEQ so that the minimum value that can be generated is -1000.
6. A new table has been requested to support tracking automated emails sent to customers.

Create the table and add data as described below.

- Tablename: email\_log
- Columns: emailid (numeric), emaildate (datetime), customer# (numeric)
- Primary key: emailid column, define as an Identity Column
- Add the following data rows and display resulting rows (if any errors occur, explain why the error is expected)
  - a. Emaildate = current date, customer# = 1007
  - b. Emailid = specify to use the column default value, emaildate = current date, customer# = 1008
  - c. Emailid = 25, emaildate = current date, customer# = 1009

7. Create a private synonym that enables you to reference the MY\_FIRST\_SEQ object as NUMGEN.
8. Use a SELECT statement to view the CURRVAL of NUMGEN. Delete the NUMGEN synonym and MY\_FIRST\_SEQ.

**Refer to the tables created in the JLDB\_Build\_8.sql script for questions 9 and 10.**

9. A manager at JustLee Books requests a list of the titles of all books generating a profit of at least \$10.00. The manager wants the results listed in descending order, based on each book's profit. Write SQL statement for the request.
10. A customer service representative is trying to identify all books in the Computer or Family Life category and published by Publisher 1 or Publisher 3. However, the results shouldn't include any book selling for less than \$45.00. Write SQL statement for the request.

Upload only the **SQL Statements** to Blackboard.