

Introduction to DDL, Check constraint, Select, Insert, Update, and Delete Statements

LAB STEPS: Complete each of the exercises below.

I. Data Definition Language (DDL)

- 1. Add column DESCRIPTION varchar(20) to Student table.
- 2. Change column DESCRIPTION varchar(20) to varchar(50).
- 3. Delete column DESCRIPTION from Student table.
- 4. Add check constraint: Sclass field of Student table only contains the following values: 'FR', 'SO', 'JR', 'SR', and 'GR'.
- 5. Add check constraint: Status field of Term table only contains the following values: 'OPEN' and 'CLOSED'.
- 6. Add check constraint: Grade field of Enrollment table only contains the following values: 'A', 'B', 'C', 'D', 'F', 'I', and 'W'.
- 7. Delete check constraint of table Enrollment.

II. Structured Query Language (SQL)

- 1. Write a query that displays a list of all students.
- 2. Write a query that displays a list of all faculties showing the faculty Flname, Ffname, Fphone
- 3. Write a query that displays each student name as a single field in the format 'firstname lastname' with a heading of Student, along with their phone number with a heading of Phone.
- 4. Write a query that displays a list of all courses showing the course Callid, Cname, and Ccredit. Sort the results by course name.
- 5. Write a query that displays a list of all students showing the student Slname, Sfname, Scity. Only display students in 'Eau Claire' city.

- 6. Write a query that displays the student Slname, Sfname, Szip, and Scity from the student table. Use the LIKE operator to only display students that reside in any zipcode ending with 02.
- 7. Write a query that displays the student Slname, Sfname, Saddr, and Scity from the student table. Use the '!=' operator to only display students that do not live in Bloomer city.
- 8. Write a query that displays a list of all students were born in 1979
- 9. Write a query that displays a list of all students were born on Aug. 19, 1979
- 10. Write a query that displays a list of all students were born in ${\tt Oct}\ 1977$
- 11. Write a query to display the student Slname, Sfname, and Saddr but only display those students that have a faculty.

12.

a. Create a statement to insert a new record into the Course table with the following values:

Cid: 4

Callid: MAT201

Cname: Linear Algebra

Ccredit: 2

b. Write a SELECT query to show the result of the INSERT statement to verify that the insert worked correctly.

13.

- a. Create a statement to update the record inserted in the previous step to change the Ccredit of this course to 4.
- b. Write a SELECT query to show the result of the UPDATE statement to verify that the update worked correctly.

14.

- a. Create a statement to delete the entire record that was inserted and then updated in the previous steps.
- b. Write a SELECT query to show the result of the DELETE statement to verify that the delete worked correctly.