|  |
| --- |
| **Assignment No.: 3**  **Name: Tejas Vishal Mishra**  **Rollno: 25041**  **Class: SE\_IT(A)** |
| **Title: DDL** |
| **Course Outcome: C214456.3 Design and implement a database schema for a given problem-domain**  **C214456.4: Implement relational database systems.** |
| **Date of Completion:** |
| **Assessment Grade / Marks:** |
| **Assessor’s Sign with Date:** |

**Assignment No: 3**

**Title / Objective:** DDL

**Problem Statement:** Create Table with primary key and foreign key constraints. a. Alter table with add n modify b. Drop table

**Course Outcome:** C214456.3 Design and implement a database schema for a given problem domain

C214456.4: Implement relational database systems

**Requirements:** MySQL Database, Operating System: Ubuntu, Windows 8, windows 10

**Theory:**

1. DDL Statements with proper explanation

a. CREATE – to create table (objects) in the database

It creates table in the database. It also specifies the name of the table and the column names. At the time of creating table, following factors are important:

* Should specify a unique column name
* Should specify proper data type along with its width,
* Maximum length of table name is 30 characters,
* Two tables should not have the same name,
* Underscore, numerals and letters are allowed but not blank space and single quotes.

Syntax: CREATE TABLE TABLE\_NAME (COLUMN\_NAME1 DATATYPE(WIDTH) CONSTRAINT, COLUMN\_NAME2 DATATYPE (WIDTH) CONSTRAINT);

b. ALTER – alters the structure of the database

At time, as the situation demands there may be a need to change the structure of a table. This change could be either to modify an existing attribute characteristic or probably to add a new attribute. You need to alter the definition of an existing table in a database. You can add or remove a column in a table. In addition, you can change the definitions of existing column in table.

Syntax: SQL> ALTER TABLE TABLE\_NAME

[ADD COLUMN\_NAME <CONSTRAINTS>]

[MODIFY COLUMN\_NAME <CONSTRAINTS>];

Restrictions on the ALTER TABLE Statement

Using the alter table clause,

* You cannot change the table name,
* You cannot change the column name
* You cannot drop a column and
* You cannot decrease the size of a column if table data exists.

c. DROP – delete table from the database

In order to delete whole existing table from the database, the DROP TABLE statement is used. When you drop a table using DROP TABLE statement, not only the row in a table, but the definition of a table is also removed from a database.

Syntax: DROP TABLE TABLE\_NAME;

**Algorithm / Methods / Steps:** (if applicable)

**Input**: University Database

**Output:** None

**Inference:** DDL means data definition language which is used to create, modify and drop the structure of the table. In this assignment, we have studied how to create tables with primary key and foreign key constraints. Alter Table is the statement which is used to modify the structure of the table. In this assignment, we also have studied how to modify the structure of the table using alter table statements.