Ex.No. 1
Date:

DDL Commands – CREATE, ALTER, DROP

Aim:

To Create, Alter and Drop the table using Data Definition Language.

Description:

Data Definition Language (DDL) statements are used to define the database structure or schema.
DDL Commands: Create, Alter, Drop, Rename, Truncate
- CREATE - to create objects in the database
- ALTER - alters the structure of the database
- DROP - delete objects from the database
- TRUNCATE - remove all records from a table, including all spaces allocated for the records are removed
- RENAME - rename an object

SYNTAX:

CREATE TABLE

CREATE TABLE table_name
(
column_name1 data_type,
column_name2 data_type,
column_name3 data_type,
....
);

ALTER A TABLE

To add a column in a table
ALTER TABLE table_name
ADD column_namedatatype;

To delete a column in a table
ALTER TABLE table_name
DROP COLUMN column_name;

DROP TABLE

DROP TABLE table_name;

TRUNCATE TABLE

TRUNCATE TABLE table_name;

Questions:

1) Create a table name STUDENT with following structure.

#	Column Name	Description	Data Type
1	RegNo	Registration Number	NUMBER(3)
2	Name	Student Name	VARCHAR(15)
3	Gender	Gender of the student	CHAR(1)
4	DOB	Date of Birth	DATE
5	MobileNo	Mobile Number	NUMBER(10)
6	City	Location of stay	VARCHAR(15)

2) Create a table name FACULTY with following structure.

#	Column Name	Description	Data Type
1	FacNo	Faculty Identifier	VARCHAR(4)
2	FacName	Faculty Name	VARCHAR(15)
3	Gender	Gender of faculty	CHAR(1)
4	DOB	Date of Birth	DATE
5	DOJ	Date of Join	DATE
6	MobileNo	Mobile Number	NUMBER(10)

3) Create a table name DEPARTMENT with following structure.

Column #Name	Description	Data Type
1 DeptNo	Department Identifier	VARCHAR(4)
2 DeptName	Department Name	VARCHAR(15)
3 DeptHead	Department Head	VARCHAR(4)

4) Create a table name COURSE with following structure.

Column #Name	Description	Data Type
1 CourseNo	Course Identifier	VARCHAR(3)
2 CourseDesc	Course Description	VARCHAR(14)
3 CourseType	Course Type	CHAR(1)
4 SemNo	Semester Number	CHAR(1)
5 HallNo	Hall Number	VARCHAR(4)
6 FacNo	Faculty Identifier	VARCHAR(4)

5) Modify the table FACULTY by adding a column name DeptNo of datatype VARCHAR(4)

OUTPUTS:

1) MySQL> create table student(Regno int(3),Name varchar(15),Gender char(1),DOB date,MobileNo int(10),city varchar(15));

```
mysql> desc student;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| Regno    | int         | YES  |     | NULL    |       |
| Name     | varchar(15) | YES  |     | NULL    |       |
| Gender   | char(1)     | YES  |     | NULL    |       |
| DOB      | date        | YES  |     | NULL    |       |
| MobileNo | int         | YES  |     | NULL    |       |
| city     | varchar(15) | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

2) MySQL> create table faculty(Facno varchar(40),FacName varchar(15),Gender char(1),DOB date,DOJ date,MobileNo int(10),DeptNo varchar(4));

```
mysql> desc faculty;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| Facno    | varchar(40) | YES  |     | NULL    |       |
| FacName  | varchar(15) | YES  |     | NULL    |       |
| Gender   | char(1)     | YES  |     | NULL    |       |
| DOB      | date        | YES  |     | NULL    |       |
| DOJ      | date        | YES  |     | NULL    |       |
| MobileNo | int         | YES  |     | NULL    |       |
| DeptNo   | varchar(4)  | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
7 rows in set (0.00 sec)
```

3) MySQL> create table department(DeptNo varchar(4),DeptName varchar(15),DeptHead varchar(4));

```
mysql> desc department;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| DeptNo   | varchar(4)  | YES  |     | NULL    |       |
| DeptName | varchar(15) | YES  |     | NULL    |       |
| DeptHead | varchar(4)  | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

4) MySQL> create table course(CourseNo varchar(3),courseDesc varchar(14),coursetype char(1),SemNo char(1),HallNo varchar(4),FacNo varchar(4));

```
mysql> desc course;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| CourseNo   | varchar(3)  | YES  |     | NULL    |       |
| courseDesc | varchar(14) | YES  |     | NULL    |       |
| coursetype | char(1)     | YES  |     | NULL    |       |
| SemNo      | char(1)     | YES  |     | NULL    |       |
| HallNo     | varchar(4)  | YES  |     | NULL    |       |
| FacNo      | varchar(4)  | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

RESULT:

Tables are created ,altered and modified using DDL commands.