

EXPERIMENT NO: 2

A) TITLE: Update or Delete records of a table and modifying structure of a table using Alter and Drop command.

OBJECTIVES: On completion of this experiment student will able to...

- update or delete the data or records in the table.
- add or delete column in the table.
- change data type of given column and rename column.
- drop a table.

THEORY:

❖ **Updating Rows:** The UPDATE command is used to change or modify data

values in table.

Updating of All Rows:

SYNTAX	UPDATE <TableName> SET <ColumnName 1> = <Expression 1 or Value 1>, <ColumnName N> = <Expression N or Value N>;
Example:	Update the address details by changing its city name to Ahmedabad. UPDATE ADDR_DTLS SET City = 'Ahmedabad';

Updating Records Conditionally:

Syntax	UPDATE <TableName> SET <ColumnName 1> = <Expression 1 or Value 1>, <ColumnName N> = <Expression N or Value N> WHERE <Condition>;
Example:	Update the branch details by changing the AMP (HO) to Head Office. UPDATE BRANCH_MSTR SET NAME = 'Head Office' WHERE NAME = 'AMP (HO)';

❖ Delete Operations:

The DELETE command deletes rows from the table that satisfies the condition provided by its WHERE clause, and returns the number of records deleted.

Removal of All Rows:

Syntax	DELETE FROM <TableName>;
Example:	Empty the ACCT_DTLS table. DELETE FROM ACCT_DTLS;

Removal of Specific Rows:

Syntax	DELETE FROM <TableName> WHERE <Condition>;
Example:	Remove only the savings bank account details from the ACCT_DTLS table. DELETE FROM ACCT_DTLS WHERE ACCT_NO LIKE 'SB%';

❖ Inserting Data into a Table from another Table:

To insert data one row at a time into a table, it is quite possible to populate a table with data that already exists in another table.

Syntax	INSERT INTO <TableName> SELECT <ColumnName1>, ... , <ColumnName N> FROM < TableName> [WHERE <Condition>];
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WHERE clause optional. Without it, all from source table copied to target table.

❖ Modifying the Structure of Tables:

You can modify a table's structure using the ALTER TABLE command, which enables adding or deleting columns and changing data types of existing columns.

Adding a new column to existing table:

Syntax	ALTER TABLE <TableName> ADD (<NewColumnName> <DataType>(<Size>), <NewColumnName> <DataType>(<Size>), ...);
Example:	Enter a new field called city in the table BRANCH_MSTR. ALTER TABLE BRANCH_MSTR ADD(CITY VARCHAR2(25));

Dropping a Column from a Table:

Syntax	ALTER TABLE <TableName> DROP COLUMN <ColumnName>;
Example:	Drop the column city from the table BRANCH_MSTR. ALTER TABLE BRANCH_MSTR DROP COLUMN CITY;

Modifying Existing Columns:

Syntax	ALTER TABLE <TableName> MODIFY(<ColumnName> <NewDataType>(<NewSize>));
Example:	Alter table BRANCH_MSTR to allow the NAME field to hold maximum of 30 characters. ALTER TABLE BRANCH_MSTR MODIFY(NAME VARCHAR2(30));

❖ Destroying Tables:

To remove an obsolete table, you can use the DROP TABLE statement followed by the table name. Be aware that dropping a table deletes all its records permanently, with no chance of recovery.

Syntax	DROP TABLE <TableName>;
Example:	Remove the table BRANCH_MSTR along with the data held. DROP TABLE BRANCH_MSTR;

EXERCISE:

1) Add a column "SPOUSE" to the emp table that will hold the name of an employee's spouse.

MySql Command:

ALTER TABLE emp

ADD COLUMN SPOUSE VARCHAR(100);

2) Modify the job of employees to "programmer" whose job is "trainee".

MySql Command:

UPDATE emp

SET job = 'programmer'

WHERE job = 'trainee';

3) Delete record whose location is "Baroda" from dept table.

MySql Command:

DELETE FROM dept

WHERE location = 'Baroda';

4) Drop a table "stud_master".

MySql Command:

DROP TABLE stud_master;

5) Create a table "ManagerHist" from emp whose job is "Manager".

MySql Command:

CREATE TABLE ManagerHist AS

SELECT *

FROM emp

WHERE job = 'Manager';

6) Copy all the information of department 20 into the “ManagerHist” table.

MySql Command:

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INSERT INTO ManagerHist  
SELECT *  
FROM emp  
WHERE deptno = 20;
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