Lab 6

Theory and Concept

Objective: - To Implement the structure of the table

Modifying the Structure of Tables- Alter table command is used to changing the structure of a table. Using the alter table clause you cannot perform the following tasks:

(i) change the name of table
(ii) change the name of column
(iii) drop a column
(iv) decrease the size of a table if table data exists.

The following tasks you can perform through alter table command.

(i) **Adding new columns**:
Syntax
ALTER TABLE tablename
ADD (newcolumnname newdatatype (size));
Example:
ALTER TABLE employees
ADD (email VARCHAR2(100));

(ii) **Modifying existing table**
Syntax:
ALTER TABLE tablename
MODIFY (newcolumnname newdatatype (size));
Example:
ALTER TABLE employees
MODIFY (salary NUMBER(10,2));

***NOTE*:** Oracle does not allow constraints defined using the alter table, if the data in thetable, violates such constraints.

Removing/Deleting Tables- Following command is used for removing or deleting a table.

Syntax:
DROP TABLE tablename:
Example:
DROP TABLE employees;

Defining Integrity constraints in the ALTER TABLE command-

You can also define integrity constraints using the constraint clause in the ALTER TABLE command. The following examples show the definitions of several integrity constraints.

(1) **Add PRIMARY KEY**-

Syntax:

ALTER TABLE tablename
ADD PRIMARY KEY (columnname);

Example:

ALTER TABLE employees
ADD PRIMARY KEY (employee_id);

(2) **Add FOREIGN KEY**-

Syntax:

ALTER TABLE
tablename
ADD CONSTRAINT constraintname
FOREIGN KEY(columnname) REFERENCES tablename;

Example:

ALTER TABLE employees
ADD CONSTRAINT fk_department
FOREIGN KEY (department_id) REFERENCES departments(id);

Dropping integrity constraints in the ALTER TABLE command:

You can drop an integrity constraint if the rule that if enforces is no longer true or if the constraint is no longer needed. Drop the constraint using the ALTER TABLE command with the DROP clause. The following examples illustrate the dropping of integrity constraints.

(1) **DROP the PRIMARY KEY**-

Syntax:

ALTER TABLE tablename
DROP PRIMARY KEY

Example:

ALTER TABLE
employees
DROP PRIMARY KEY;

(2) **DROP FOREIGN KEY**-

Syntax:

ALTER TABLE tablename
DROP CONSTRAINT constraintname;

Example:

ALTER TABLE employees
DROP CONSTRAINT fk_department

Question 1. Create the following tables:

Challan_Header

Column name	data type	size	Attributes
Challan_no	Varchar	6	Primary key
s_order_no	Varchar	6	Foreign key references s_order_no of sales_order table
challan_date	date		not null
billed_yn	char	1	values ('Y','N'). Default 'N'

Table Name : Challan_Details

Column name	data type	size	Attributes
Challan_no	varchar	6	Primary key/Foreign key references Product_no of product_master
Qty_disp	number	4,2	not null

Q2. Insert the following values into the challan header and challan_details tables:

(i)

Challan No	S_order No	Challan Date	Billed
CH9001	019001	12-DEC-95	Y
CH865	046865	12-NOV-95	Y
CH3965	010008	12-OCT-95	Y

Data for challan_details table

Challan No	Product No	Qty Disp
CH9001	P00001	4
CH9001	P07965	1
CH9001	P07885	1
CH6865	P07868	3
CH6865	P03453	4
CH6865	P00001	10
CH3965	P00001	5
CH3965	P07975	2

Objective – Answer the following Questions.

Q1. Make the primary key to client_no in client_master.

Q2. Add a new column phone_no in the client_master table.

Q3. Add the not null constraint in the product_master table with the columns description, profit percent, sell price and cost price.

Q4. Change the size of client_no field in the client_master table.

Q5. Select product_no, description where profit percent is between 20 and 30 both inclusive.