Oracle
Version 12c

Alter or Modify table structure and constraints

Enabling Objectives

After completing this chapter, in the next 30 minutes you will be able to :

- Modify or drop at least 1 table structure created using DDL statement available in oracle database

Key Topics

- Alter table structure
- Alter constraints
- Drop table structure

Alter Table

- ALTER TABLE statement is used alter table structure

  - Add new columns
  - Modify existing columns
  - Define default values for new columns
  - Drop a column

ALTER TABLE t_name
        ADD | MODIFY (column datatype [DEFAULT EXPR])

ALTER TABLE t_name
DROP (column)

Guidelines to ALTER TABLE

- Only one column can be dropped at a time

- The table must have at least one column remaining, after it is altered

  ALTER TABLE Employee modify (e_code number(5));

- Allow to decrease column width only if the column has no values

Alter constraints

- ALTER TABLE statement used to add or drop a constraint
- Not null constraints can only be added using ALTER TABLE MODIFY clause
- Constraint can be enabled or disabled

Lend a hand

- Alter the Employee table created adding following constraints

ALTER TABLE Employee add constraint chk_sal
                        check (e_salary > 0);

ALTER TABLE Employee add constraint uq_mail unique(e_mail);

ALTER TABLE Employee add constraint pk_ecode
            primary key(e_code);

Lend a hand <Continued>

ALTER TABLE Employee add constraint fk_dcode
foreign key (dept_id) references department (dept_id);

ALTER TABLE Employee drop constraint chk_sal;

Dropping a Table

- DROP table command is used to drop the table structure from the database

- All data and the structure in the table gets deleted

Drop table structure

- Only the creator of the table or a user with DROP ANY TABLE privilege can remove a table

Drop table Employee;

Practice Check

Alter the structure of the suppliers table and constraints as per the requirement provided in table

Field	Data type	Constraint
supplier_id	number(10)	
supplier_name	varchar2(50)	
address	varchar2(100)	Length of the field to 100
city	varchar2(50),	Default "NA"
state	varchar2(25)	Length of the field to 50
zip_code	varchar2(10))	

RECAP

In this chapter we have learnt how to:

- Modify table structure or constraints using DDL statements.

- Drop table structure using DDL statements

You have successfully completed -

How to Alter or Modify table structure and constraints