

Example:

Assume table TEST1 with the following structure

```
CREATE TABLE test1 ( pk number PRIMARY KEY, fk number, col1 number, col2 number,
CONSTRAINT fk_constraint FOREIGN KEY(fk) references test1, CONSTRAINT ck1 CHECK
(pk>0 and col1>0), CONSTRAINT ck2 CHECK (col2>0));
```

An error is returned for the following statements

```
ALTER TABLE test1 DROP (pk);
```

```
ALTER TABLE test1 DROP (col1);
```

The above statement can be written with CASCADE CONSTRAINT

```
ALTER TABLE test1 DROP(pk) CASCADE CONSTRAINTS;
```

(OR)

```
ALTER TABLE test1 DROP(pk, fk, col1) CASCADE CONSTRAINTS;
```

VIEWING CONSTRAINTS

Query the USER_CONSTRAINTS table to view all the constraints definition and names.

Example:

```
SELECT constraint_name, constraint_type, search_condition FROM user_constraints
WHERE table_name='employees';
```

Viewing the columns associated with constraints

```
SELECT constraint_name, constraint_type, FROM user_cons_columns
WHERE table_name='employees';
```

Find the Solution for the following:

1. Add a table-level PRIMARY KEY constraint to the EMP table on the ID column. The constraint should be named at creation. Name the constraint my_emp_id_pk.

ALTER TABLE EMP

ADD CONSTRAINT my-emp-id-pk . PRIMARY KEY (ID)

2. Create a PRIMARY KEY constraint to the DEPT table using the ID column. The constraint should be named at creation. Name the constraint my_dept_id_pk.

ALTER TABLE DEPT

ADD CONSTRAINTS my_dept_id_pk PRIMARY KEY (ID);

3. Add a column DEPT_ID to the EMP table. Add a foreign key reference on the EMP table that ensures that the employee is not assigned to nonexistent department. Name the constraint my_emp_dept_id_fk.

ALTER TABLE EMP

ADD DEPT_ID NUMBER;

ALTER TABLE EMP;

ADD CONSTRAINT my_emp_dept_id_pk

FOREIGN KEY (DEPT-ID)

REFERENCES DEPT(ID);

4. Modify the EMP table. Add a COMMISSION column of NUMBER data type, precision 2, scale 2. Add a constraint to the commission column that ensures that a commission value is greater than zero.

ALTER TABLE EMP ADD COMMISSION NUMBER(5,2);

ALTER TABLE EMP

ADD CONSTRAINT commission check

CHECK (COMMISSION >0);

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	Ranjan 09/11/2023