

### 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.

```
CREATE TABLE EMP (  
ID number (10),  
CONSTRAINT my_emp_id_pk PRIMARY KEY (ID)  
);
```

```
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.

```
CREATE TABLE DEPT (
  Id-num (10);
```

```
CONSTRAINT 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(10);
```

```
ADD CONSTRAINT my_emp_dept_id_fk 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(2,2));
```

```
ALTER TABLE EMP
```

```
ADD CONSTRAINT check_commission CHECK (COMMISSION > 0);
```

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	<i>[Signature]</i>