

## Some DDL examples

```
--DROP TABLE emp1;
--DROP TABLE dept1;
CREATE TABLE emp1 AS SELECT * FROM nikovits.emp;
CREATE TABLE dept1 AS SELECT * FROM nikovits.dept;
```

### Creating a SEQUENCE

```
-- DROP SEQUENCE seq1;
CREATE SEQUENCE seq1 MINVALUE 1 MAXVALUE 100 INCREMENT BY 5
START WITH 50 CYCLE;
SELECT seq1.NEXTVAL FROM dual;
SELECT seq1.CURRVAL FROM dual;
```

### Creating a SYNONYM

```
--DROP SYNONYM other_name;
CREATE SYNONYM other_name FOR emp1;
SELECT * FROM other_name;
```

### Primary key constraint

```
ALTER TABLE emp1 ADD CONSTRAINT emp1_empno_pk PRIMARY KEY (empno);
ALTER TABLE dept1 ADD CONSTRAINT dept1_deptno_pk PRIMARY KEY (deptno);
```

### Foreign key constraint

```
ALTER TABLE emp1 ADD CONSTRAINT emp1_deptno_fk FOREIGN KEY (deptno)
REFERENCES dept1 (deptno) ON DELETE CASCADE;
```

### Check previous foreign key

```
DELETE FROM dept1 WHERE deptno = 10;
SELECT * FROM dept1;
SELECT * FROM emp1;
ROLLBACK;
```

### Add a new column

```
ALTER TABLE emp1 ADD (mgr1 NUMBER(4));
```

### Add a new column with constraint

```
ALTER TABLE emp1 ADD (mgr2 NUMBER(4) CONSTRAINT emp1_mgr2_fk
REFERENCES emp1 (empno));
```

### NOT NULL constraint

```
ALTER TABLE emp1 MODIFY (sal CONSTRAINT emp1_sal_nn NOT NULL);
```

### UNIQUE constraint

```
ALTER TABLE emp1 ADD CONSTRAINT emp1_ename_u UNIQUE (ename);
```

### CHECK constraint

```
ALTER TABLE emp1 ADD CONSTRAINT emp1_c1 CHECK (sal <= 9999);
ALTER TABLE emp1 ADD CONSTRAINT emp1_c2 CHECK (sal >= 500);
```

### Rename a column

```
ALTER TABLE emp1 RENAME COLUMN sal TO sal2;
```

### Drop a constraint

```
ALTER TABLE emp1 DROP CONSTRAINT emp1_c1;
```

### Query the constraint from **Data Dictionary** with SQL

```
SELECT cons.table_name Tab, SUBSTR(col.column_name,1,10) Col,  
       cons.constraint_name Constr_name, cons.constraint_type  
Constr_type,  
       cons.search_condition Cond  
FROM user_constraints cons, user_cons_columns col  
WHERE cons.constraint_name = col.constraint_name  
AND LOWER(cons.table_name) IN ('emp1','dept1')  
ORDER BY 1, 2;
```

### Drop the tables. The order is important!!!

```
DROP TABLE dept1; -- it will give an error  
DROP TABLE emp1;  
DROP TABLE dept1; -- now it is OK.
```

Data model of the two tables:

