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 <mark>Data Dictionary</mark> 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: