Create Table DEPT(  
DEPTNO number(2),  
DNAME char(15) CHECK ((DNAME=UPPER(DNAME)) and  
(DNAME IN ('ACCOUNTING','RESEARCH','SALES','OPERATIONS'))),  
LOC VARCHAR(20),  
CONSTRAINT PK\_DEPTNO PRIMARY KEY(DEPTNO)  
);  
ALTER Table DEPT modify LOC VARCHAR2(20) UNIQUE ;  
  
Create Table EMP (  
EMPNO number(4) primary key,  
ENAME char(15),  
Job CHAR (15) Not Null,  
SAL number(6,2) Not Null,  
HIREDATE date Not Null,  
COMM number(6,2),  
DEPTNO number(2) references DEPT(DEPTNO)  
) ;  
  
ALTER Table EMP Add MGR NUMBER(4) ;  
ALTER Table EMP Add Constraint FK\_MGR Foreign Key (MGR) REFERENCES EMP(EMPNO);  
  
ALTER Table EMP Add constraint CK\_Sal check (SAL>=600) ;  
  
ALTER Table EMP Drop Constraint ck\_Sal ;  
  
ALTER Table EMP rename Column Comm to COMMISSION ;  
  
ALTER Table EMP Add LNAME char(15) ;  
  
ALTER Table EMP modify LNAME char(30) ;  
  
ALTER Table EMP Drop (LNAME) ;  
  
CREATE TABLE SALGRADE (  
GRADE number(2) primary key, LOWSAL number (6,2), HIGHSAL number(6,2)  
);

insert into DEPT(DEPTNO,DNAME,LOC) VALUES (10, 'ACCOUNTING','NEW YORK');  
insert into DEPT VALUES (20, 'RESEARCH','DALLAS');  
insert into DEPT VALUES (30, 'SALES','CHICAGO');  
insert into DEPT(DEPTNO,DNAME,LOC)VALUES (40, 'OPERATIONS','BOSTON');  
  
insert INTO EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7839,'KING','PRESIDENT',5000,'02/06/2008',null,30,null);  
  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7521, 'WARD', 'SALESMAN',1250, to\_date('21/02/2001','DD/MM/YYYY'), 500, 30, 7839);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES(7654,'MARTIN','SALESMAN',1250,to\_date('06/11/2011','DD/MM/YYYY'),1400,30,7839);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES(7698,'BLAKE','MANAGER',2850,to\_date('01/04/2009','DD/MM/YYYY'),null,30,7839);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES(7369,'SMITH','CLERK',800,to\_date('17/12/2008','DD/MM/YYYY'),null,20,7698);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES(7566,'JONES','MANAGER',2975,to\_date('01/09/2008','DD/MM/YYYY'),null,20,7698);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES(7788,'SCOTT','ANALYST',3000,to\_date('17/12/2008','DD/MM/YYYY'),null,10,7698);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7900, 'JAMES', 'CLERK', 750, to\_date( '03/12/2011','DD/MM/YYYY'), null , 10, 7698);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7499, 'ALLEN', 'SALESMAN', 1600, to\_date('20/02/2001','DD/MM/YYYY'), 300 , 30, 7698);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7782, 'CLARK', 'MANAGER', 2450, to\_date('27/09/2010','DD/MM/YYYY'), null, 40, 7566);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7902, 'FORD', 'ANALYST', 3000, to\_date('03/12/2011','DD/MM/YYYY'), null, 20, 7566);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7934, 'MILLER', 'CLERK',1300 , to\_date('23/01/2012','DD/MM/YYYY'), null, 10, 7566);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7876, 'ADAMS', 'CLERK', 1100, to\_date('12/01/2013','DD/MM/YYYY'), null, 30, 7788);  
insert into EMP (EMPNO,ENAME,JOB,SAL,HIREDATE,COMMISSION,DEPTNO,MGR) VALUES (7844, 'TURNER', 'SALESMAN', 1500 , to\_date('07/09/2018','DD/MM/YYYY'), 150 , 20, 7782);  
  
INSERT INTO SALGRADE (GRADE,LOWSAL,HIGHSAL) VALUES(1,700,1200);  
INSERT INTO SALGRADE (GRADE,LOWSAL,HIGHSAL) VALUES(2,1201,1400);  
INSERT INTO SALGRADE (GRADE,LOWSAL,HIGHSAL) VALUES(3,1401,2000);  
INSERT INTO SALGRADE (GRADE,LOWSAL,HIGHSAL) VALUES(4,2001,3000);  
INSERT INTO SALGRADE (GRADE,LOWSAL,HIGHSAL) VALUES(5,3001,9999);

UPDATE EMP SET JOB='SALESMAN' WHERE upper (ENAME)='SCOTT';

UPDATE EMP SET SAL=SAL\*1.1 WHERE COMMISSION> 0.5\*SAL;

UPDATE EMP  
SET COMMISSION=(SELECT AVG(COMMISSION) FROM EMP) WHERE HIREDATE<'01/01/2010' AND COMMISSION IS NULL;

DELETE FROM EMP WHERE UPPER(ENAME)='TURNER';

DELETE FROM DEPT WHERE DEPTNO=20 ;

SELECT \* from EMP where TO\_Char(HIREDATE,'yyyy') = '2011';  
SELECT \* from EMP where HIREDATE between '01/01/2011' and '31/12/2011';  
SELECT \* from EMP where HIREDATE >= '01/01/2011' and HIREDATE <='31/12/2011'; SELECT \* from EMP where EXTRACT(YEAR from HIREDATE) = 2011;  
SELECT \* from EMP where EXTRACT(YEAR from HIREDATE) = 2011;

SELECT ENAME , ROUND(SAL) from EMP where upper(ENAME) like '\_L%';  
SELECT ENAME , ROUND(SAL) from EMP where lower(ENAME) like '\_l%';

SELECT DISTINCT UPPER(SUBSTR(JOB,1,1)) || LOWER(SUBSTR(JOB,2, LENGTH(JOB))) FROM EMP;  
SELECT DISTINCT INITCAP(JOB)  FROM EMP;

SELECT HIREDATE FROM EMP  
WHERE UPPER(JOB) IN ('ANALYST','MANAGER');  
SELECT HIREDATE FROM EMP  
WHERE UPPER(JOB) = 'ANALYST' OR UPPER(JOB) = 'MANAGER';

SELECT ENAME, decode(DEPTNO,10,'\*\*\*\*',20,'####',SAL) As SALAIRE from EMP ;

SELECT ENAME, FLOOR (MONTHS\_BETWEEN (SYSDATE, HIREDATE)) FROM EMP ;

Select ENAME, DNAME FROM EMP E, DEPT D WHERE E.DEPTNO=D.DEPTNO;

SELECT ENAME FROM EMP WHERE MGR=(SELECT MGR FROM EMP WHERE ENAME='CLARK');

SELECT E.ENAME, E.SAL, S.ENAME, S.SAL  
FROM EMP E, EMP S WHERE S.EMPNO=E.MGR AND E.SAL>S.SAL;

SELECT ENAME  
FROM EMP  
WHERE DEPTNO=(SELECT DEPTNO FROM DEPT WHERE DNAME='RESEARCH')  
     AND SAL <= (SELECT HIGHSAL FROM SALGRADE WHERE GRADE = 4)  
     AND SAL >= (SELECT LOWSAL FROM SALGRADE WHERE GRADE = 4) ;