-- Lab 6 Hemyan AL-Kuwari

-- 1- The NOT NULL Constraint

create table emp5(empno number(4), ename varchar(10) Not Null, deptno number(2) Not Null);

insert into emp5 values (123,Null,10); -- Can't put null for something that should not be null

-- 2- The UNIQUE Key Constraint

create table dept5 (deptno number(2), dname varchar2(14), loc varchar2(13), constraint dept5\_dname\_uk unique (dname));

insert into dept5 values (3,'CSE','QU');

insert into dept5 values (44,'CSE','QF');

-- 3- The PRIMARY KEY Constraint

create table dept6 (deptno number(2), dname varchar2(14), loc varchar2(13),constraint dept6\_dname\_uk unique (dname), constraint dept6\_deptno\_pk primary key (deptno));

create table customer ( year number(4), id number(4), name varchar2(20), phone number (7), constraint customer\_year\_id\_pk primary key(year, id));

-- 4- The FOREIGN KEY Constraint

create table emp6(empno number(4), ename varchar2(10) not null, deptno number(4), constraint emp6\_dept\_fk foreign key (deptno) references dept(deptno));

create table customer2 (id number(4) primary key, name varchar2(20), deptno number(3), constraint customer2\_deptno\_fk foreign key (deptno) references dept(deptno) on delete cascade);

-- a

insert into dept values (88,'HR','DOHA');

-- b

insert into customer2 values (123,'AHMED', 88);

-- c

delete from dept where deptno = 88;

-- d

-- 4- The CHECK Constraint

create table emp7 (empno number(4), ename varchar2(10) not null, deptno number(2) not null, gender char(1), constraint emp7\_gender\_ck check (gender='M' or gender='F'));

insert into emp7 values ('555', 'MARK', 99, 'M');

create table customer3 (id number(3), name varchar2(20), constraint name\_nn check(name is not null));

create table emp8 as select \* from emp;

alter table emp8 add constraint emp8\_empno\_pk primary key(empno);

-- Dropping a Constraint

alter table emp8 drop constraint emp8\_empno\_pk;

-- Disabling and Enabling Constraint

alter table emp8 enable constraint emp8\_empno\_pk;

alter table emp8 disable constraint emp8\_empno\_pk;

-- Set Operators:

create table job\_history (emp\_id number(4) not null, job varchar2(10) not null, start\_date date not null, end\_date date not null, deptno number(2));

insert into job\_history values (7369, 'SALESMAN', '17 DEC 80' , '25 JAN 82', 30);

insert into job\_history values (7369, 'CLERK', '26 JAN 82' , '30 MAY 85', 10);

insert into job\_history values (7839, 'ANALYST', '17 NOV 81' , '12 JUN 83', 20);

insert into job\_history values (7839, 'PRESIDENT', '28 JUN 83' , '01 MAR 84', 30);

insert into job\_history values (7654, 'CLERK', '28 SEP 81' , '02 FEB 84', 10);

select empno,job from emp union select emp\_id, job from job\_history;

select empno,job from emp union all select emp\_id, job from job\_history;

select empno,job from emp intersect select emp\_id, job from job\_history;

select empno,job from emp minus select emp\_id, job from job\_history;

-- Oracle Data Dictionary :

select \* from user\_tables;

select \* from user\_constraints;

select table\_name, tablespace\_name from user\_tables;

select constraint\_name, constraint\_type, status, table\_name from user\_constraints;

select table\_name, tablespace\_name from all\_tables;