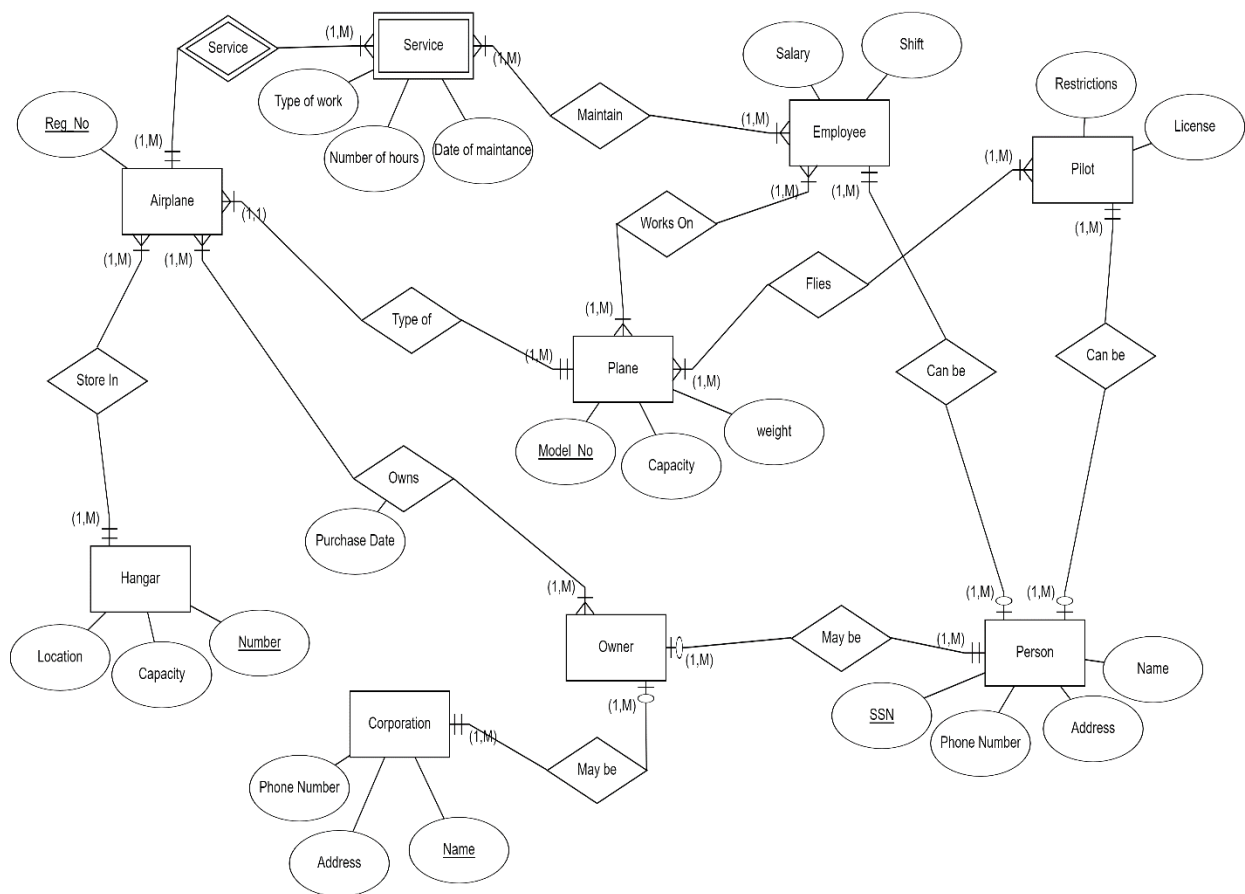# Name:Salma El-sayed

ID:17105510

Question 1

ERD

Mapping

Hangar : NUM (PK) , capacity , location
Airplane : REG_NUM (PK) , NUM (FK) , Model (FK)

Service : Hours , date of maintenance(PK) , type of work done (PK), REG_NUM (FK)

Maintain : date of maintenance(FK) , type of work done (FK) , E_SSN (FK)

And all of them are Primary key of this table

Plane_type : Model (PK) , capacity , weight

Works on : Model (FK) , E_SSN (FK)

And all of them are Primary key of this table

Files : Model (FK) , P_SSN (FK)

And all of them are Primary key of this table

Owns : REG_NUM (FK) , SSN (FK), Name (FK) , pdate

Owner : Person , Corporation

Person : SSN , Name , address , phone

Corporation : Name , address , phone

Employee : E_SSN (PK) , salary , shift , Name , phone , address

Pilot : License Number , Restrictions , P_SSN(PK) , phone , address , name.

Question 2

SQL Query

1)select e.ename , e.empno from scott.emp e , scott.emp m where e.mgr = m.empno intersect select e.ename, e.empno from scott.emp e , scott.emp m where m.mgr =e.empno;

2)select e.ename,e.mgr from scott.emp e,scott.emp m where e.empno in (m.mgr) intersect (select e.ename,e.mgr from scott.emp e,scott.emp m where e.empno in (m.mgr)) intersect (select ename, mgr from scott.emp where mgr is not null)