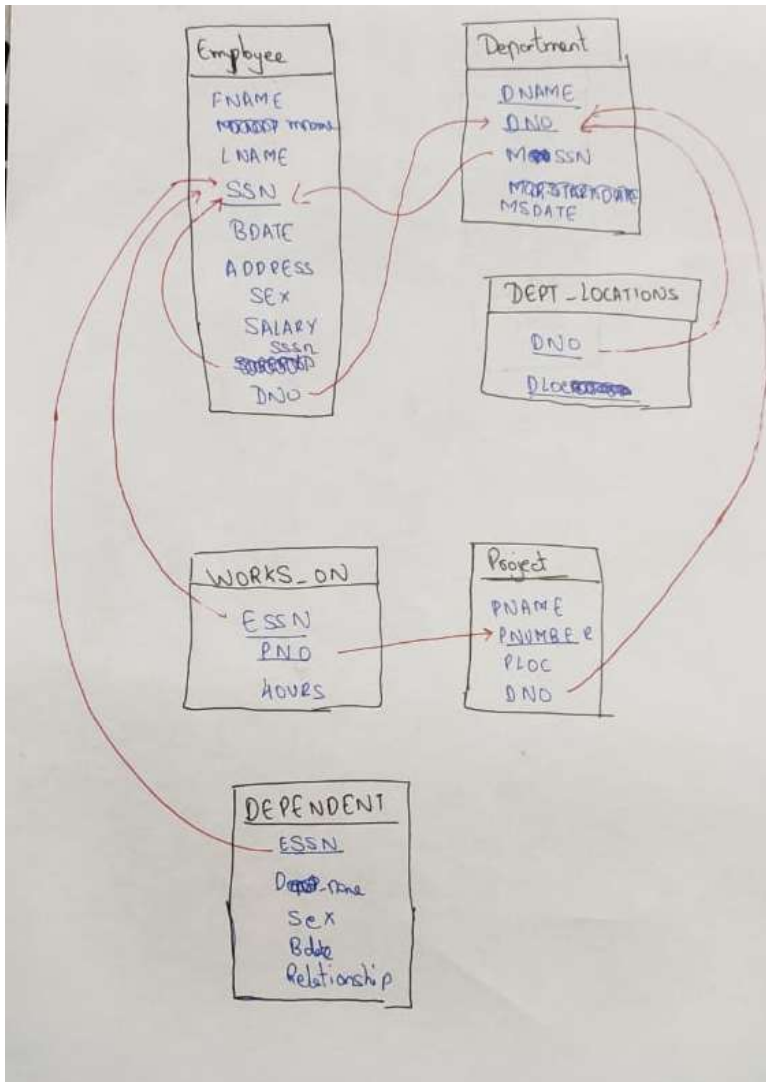# LAB 5

Aniket sambher

Reg no-190905466

Section -A

Roll no-58

CREATE DDL and inserting queries

CREATE DDL and inserting queries

```
create table EmployeeComp (

fname varchar(20) not null,

minit varchar(2),

lname varchar(20) not null,

ssn number(8) not null,

address varchar(40) not null,

bdate date,

sex varchar(1) not null check (sex in ('M', 'F')),

salary number(8),

sssn number(8),

dno number(8),

primary key (ssn)

);

alter table EmployeeComp add foreign key(sssn) references EmployeeComp(ssn);

insert into EmployeeComp values ('Harold', 'J.', 'Finch', 101, 'Classified', '10-NOV-61', 'M',
192000,

null, 601);

insert into EmployeeComp values ('John', 'B.', 'Smith', 102, '5th Avenue, NY', '21-FEB-72',
'M',

112000, 101, 603);

insert into EmployeeComp values ('Sameen', 'R.', 'Shaw', 103, '4th Loop, NY', '18-DEC-78', 'F',

112000, 101, 603);

insert into EmployeeComp values ('Samantha', 'R.', 'Groves', 104, '1, Infinite Loop', '08-APR-
79', 'F',

250000, null, 602);

insert into EmployeeComp values ('Lionel', 'P.', 'Fusco', 105, '18th Rose Drive', '10-JUN-68',
'M',

89000, 104, 606);

insert into EmployeeComp values ('John', 'F.', 'Greer', 106, 'Classified', '28-DEC-51', 'M',
800000, null,609);
```

```sql
create table DepartmentComp (

dname varchar(20) not null,

dno number(8) not null,

mssn number(8) not null,

msdate date,

primary key (dno),

foreign key (mssn) references EmployeeComp(ssn)

);

insert into DepartmentComp values ('Admin', 601, 101, '02-JAN-03');

insert into DepartmentComp values ('Machine Field', 603, 102, '02-MAY-11');

insert into DepartmentComp values ('Analog Interface', 602, 104, '02-JAN-03');

insert into DepartmentComp values ('Enforcement', 606, 105, '02-JAN-78');

insert into DepartmentComp values ('Samaritan', 609, 106, '02-DEC-13');

create table DeptLocComp (

dno number(8) not null,

dloc varchar(20) not null,

primary key (dno, dloc),

foreign key (dno) references DepartmentComp(dno)

);

insert into DeptLocComp values (601, 'Classified');

insert into DeptLocComp values (602, 'Thornhill');

insert into DeptLocComp values (603, 'NY');

insert into DeptLocComp values (606, 'Brooklyn 99');

insert into DeptLocComp values (609, 'Texas');

create table ProjectComp (

pname varchar(20) not null,

pno number(8) not null,

ploc varchar(20),

dno number(8) not null,
```

```sql
primary key (pno),

foreign key (dno) references DepartmentComp(dno)

);

insert into ProjectComp values ('ProjectX', 701, 'NY', 601);

insert into ProjectComp values ('ProjectY', 702, 'FR', 602);

insert into ProjectComp values ('ProjectZ', 703, 'TX', 606);

insert into ProjectComp values ('ProjectW', 704, 'CA', 609);

create table WorksOnComp (

essn number(8) not null,

pno number(8) not null,

hours number(6),

foreign key (essn) references EmployeeComp(ssn),

foreign key (pno) references ProjectComp(pno)

);

insert into WorksOnComp values (101, 701, 32);

insert into WorksOnComp values (102, 702, 16);

insert into WorksOnComp values (103, 702, 16);

insert into WorksOnComp values (104, 704, 40);

create table DependentComp (

essn number(8),

dname varchar(20),

sex varchar(1) not null check (sex in ('M', 'F')),

bdate date,

relationship varchar(20),

primary key (essn,dname),

foreign key (essn) references EmployeeComp(ssn)

);

insert into DependentComp values (101, 'Bear', 'M', '10-OCT-01', 'Pet');

insert into DependentComp values (102, 'WorldMan', 'M', '10-OCT-01', 'Father');
```

insert into DependentComp values (103, 'Jakku', 'M', '10-OCT-01', 'Son');

insert into DependentComp values (104, 'Machine', 'M', '02-JAN-03', 'Interface');

Queries

1. Select bdate,address from CompEMPLOYEE where fname='John' and minit='B.' and lname='Smith';

   Select fname,minit,lname,address from EmployeeComp natural join DepartmentComp where dname='Research';

2. Select pno,EmployeeComp.dno,lname,address,bdate from DepartmentComp natural join ProjectComp,EmployeeComp

3. Select distinct(salary) from EmployeeComp;

4. Select T.lname supervisorLname,T.fname supervisorFname,S.lname ,S.fname from EmployeeComp T,EmployeeComp S where T.ssn=S.sssn;

5. Select ProjectComp.pno from EmployeeComp,WorksOnComp,ProjectComp where lname='Smith' and EmployeeComp.ssn=WorksOnComp.essn and WorksOnComp.pno=ProjectComp.pno;

6. Select * from EmployeeComp where address like '%Houston, Texas%';

7. Update EmployeeComp set salary=1.1*salary where EmployeeComp.ssn in (Select essn from WorksOnComp,ProjectComp where WorksOnComp.pno=ProjectComp.pno and pname='ProductX');

8. Select fname,lname from DepartmentComp,EmployeeComp where DepartmentComp.dno=5 and salary between 30000 and 40000 and EmployeeComp.dno=DepartmentComp.dno

9. select fname,lname,pname from EmployeeComp,ProjectComp,WorksOnComp where WorksOnComp.pno = ProjectComp.pno and WorksOnComp.essn = EmployeeComp.ssn order by EmployeeComp.dno,lname,fname;

10. Select fname,minit,lname from EmployeeComp where sssn is null;

11. Select fname,minit,lname from EmployeeComp where sssn is null;

12. Select distinct(fname) from EmployeeComp,DependentComp where EmployeeComp.ssn not in (Select essn from DependentComp);

13. Select distinct(fname) from EmployeeComp,DependentComp where EmployeeComp.sssn is null and EmployeeComp.ssn in (Select essn from DependentComp);

14. select distinct(ssn) from EmployeeComp,WorksOnComp where pno=1 or pno=2 or pno=3 and EmployeeComp.ssn=WorksOnComp.essn;

15. Select sum(salary),max(salary),min(salary),avg(salary) from EmployeeComp;

16. Select sum(salary),max(salary),min(salary),avg(salary) from EmployeeComp,DepartmentComp where EmployeeComp.dno=DepartmentComp.dno and dname='Research;

17. with m(pno, no_of_emp) as (select pno, count(*) from WorksOnComp group by pno) select pno, pname, no_of_emp from m inner join ProjectComp using(pno);

18. with m(pno, no_of_emp) as (select pno, count(*) from WorksOnComp group by pno) select pno,pname,no_of_emp from m inner join ProjectComp using(pno) where no_of_emp >2;

19. CREATE VIEW E AS (Select dno, count(*) no_of_emp from EmployeeComp where salary > 40000 group by dno having count(*)>5);
select distinct(DepartmentComp.dno), DepartmentComp.dname, no_of_emp from E,DepartmentComp where E.dno = DepartmentComp.dno order by DepartmentComp.dno;