COMPANY quiz

1.- create database <user>_company
Sql:

```
-[arturozr@tec2021 ~]$ \createdb arturozr_company;

-arturozr_company=# create table empleados(idSsn varchar(20),
cumpleanos varchar(50), apellidoPat varchar(20), apellidoMat
varchar(20), nombre varcha
r(20), minit varchar(20), salario varchar(20), sexo varchar(10),
depNumber varchar(20), super varchar(20));

-create table dependencia(nombreDependencia varchar (50), sexo
varchar(10), cumpleanos varchar(30), relacion varchar(30), essn var
char(20));
CREATE TABLE

-create table departamento(numero varchar(20), nombre varchar(20),
mgrSsn varchar(20), dnumber varchar(20));

-create table worksOn(ssn varchar(30), pNumber varchar(20), horas
varchar(15));

-create table proyectos(pnumber varchar(10), pnombre varchar(50),
plocacion varchar(30), dnumber varchar(20));

-create table deptLocations(dNumber varchar(30), location
varchar(30));

-alter table empleados add constraint pk_idSsn primary key(idSsn);

-alter table departamento add constraint pk_numero primary
key(numero);

-alter table deptlocations add constraint pk_dnumber primary
key(dnumber);

-alter table proyectos add constraint pk_pnumber primary
key(pnumber);

-alter table empleados add constraint fk_idnumerodep_idssn foreign
key(depnumber) references departamen
to(numero);

-alter table departamento add constraint fk_dnumber_dnumber foreign
key(dnumber) references deptlocatio
ns(dnumber);
```

```
-alter table departamento add constraint fk_mgrssn_idssn foreign
key(mgrssn) references empleados(idssn);

-alter table empleados add constraint fk_superssn_idssn foreign
key(super) references empleados(idssn);

-alter table workson add constraint fk_ssn_idssn foreign key(ssn)
references empleados(idssn);

-alter table workson add constraint fk_pnumber_pnumber foreign
key(pnumber) references proyectos(pnumber);

-alter table dependencia add constraint fk_essn_idssn foreign
key(essn) references empleados(idssn);
```

2.- insert 5 locations
Sql:

```
-insert into deptlocations values('1', 'piso1');
-insert into deptlocations values('2', 'piso2');
-insert into deptlocations values('3', 'piso3');
-insert into deptlocations values('4', 'piso4');
-insert into deptlocations values('5', 'piso5');
```

3.- insert 3 departaments
Sql:

```
-insert into departamento values('d1', 'gestion', null, '1');
-insert into departamento values('d2', 'maquetado', null, '2');
-insert into departamento values('d3', 'desarrollo', null, '3');
-insert into departamento values('d4', 'testing', null, '4');
-insert into departamento values('d5', 'rh', null, '5');
```

4.- insert 5 employees
Sql:

```
-insert into empleados values('111','20/febrero/1999', 'perez',
'marian', 'jorge', 'SR', '5000', 'hombre', 'd1', null);
-insert into empleados values('112', '2\enero\1999', 'conde', 'rios',
'mauricio', 'SR', '5000', 'hombre', 'd2', null);
-insert into empleados values('113', '26\diciembre\1997', 'zilli',
'rios', 'arturo', 'SR', '10000', 'hombre', 'd3', null);
```

```
-insert into empleados values('114', '3\mayo\1987', 'carmen',
'grajalez', 'milagros', 'SRA', '1000', 'mujer', 'd4', null);
-insert into empleados values('115', '30\octubre\2000', 'perez',
'corona', 'monse', 'SRA', '1000', 'mujer', 'd5', null);
```

5.- insert 5 projects
Sql:

```
-insert into proyectos values('11', 'desarrolloweb', 'web', 'd1');
-insert into proyectos values('12', 'desarrollomovil', 'movil',
'd3');
-insert into proyectos values('13', 'desarrolloescritorio',
'escritorio', 'd2');
-insert into proyectos values('14', 'maquetado', 'maquetas', 'd2');
-insert into proyectos values('15', 'testing', 'test', 'd4');
```

6.- insert employees works_on projects (10 records)
Sql:

```
-insert into workson values('111', '11', '3');
-insert into workson values('111', '12', '3');
-insert into workson values('112', '12', '8');
-insert into workson values('112', '11', '2');
-insert into workson values('113', '14', '6');
-insert into workson values('113', '15', '3');
-insert into workson values('114', '13', '5');
-insert into workson values('114', '11', '2');
-insert into workson values('115', '15', '10');
-insert into workson values('111', '13', '4');
```

7.- insert 5 dependents
Sql:

```
-insert into dependencia values('director', 'hombre', '20\noviembre\
1990', 'empleador', '111');
-insert into dependencia values('director', 'hombre', '20\noviembre\
1990', 'empleador', '112');
-insert into dependencia values('capacitador', 'mujer', '10\
septiembre\1980', 'empleador', '113');
-insert into dependencia values('capacitador', 'mujer', '10\
septiembre\1980', 'empleador', '113');
-insert into dependencia values('reclutador', 'mujer', '10\octubre\
1986', 'empleador', '114');
```

Querys COMPANY

8.- name, lastname of employees
Sql:
select nombre, apellidopat, apellidomat from empleados;

9.- number of departments
Sql:
select count(*) from departamento;

10.- average of salary in employees
Sql:
select avg(salario) from empleados;

11.- min salary in employees
Sql:
select min(salario) from empleados;

12.- max salary in employees
Sql:
select max(salario) from empleados;

13.- name of employee, name of department where is assigned
Sql:
select empleados.nombre, departamento.nombre from empleados, departamento where empleados.depnumber = departamento.numero;
select empleados.nombre, departamento.nombre from empleados join departamento on empleados.depnumber = departamento.numero;
select e.nombre, d.nombre from empleados as e join departamento as d on e.depnumber = d.numero;

14.- name of employee, name of dependents and relationship
Sql:
select e.nombre, d.nombreDependencia , d.relacion from empleados as e join dependencia as d on e.idssn = d.essn;
select e.nombre, d.nombreDependencia , d.relacion from empleados as e, dependencia as d where e.idssn = d.essn;

15.- name of departament, name of locations
Sql:
select departamento.nombre, deptLocations.location from departamento, deptLocations where departamento.dnumber=deptLocations .dnumber;

select departamento.nombre, deptLocations.location from departamento join deptLocations on departamento.dnumber=deptLocations .dnumber;

16.- number of employees by departament
Sql:

select depnumber, count(*) from empleados group by depnumber;

17.- number of employees by project
Sql:

select pnumber, count(*) from workson group by pnumber;

18.- number of departments by locations
Sql:

select dnumber, count(*) from departamento group by dnumber;

19.- number of employees group by sex
Sql:

select sexo, count(*) from empleados group by sexo;

20.- name of employees, department name (only if name start with 'A')
Sql:

select e.nombre, d.nombre from (select depnumber, nombre from empleados) as e join (select numero, nombre from departamento where nombre like '%m%') as d on e.depnumber = d.numero;