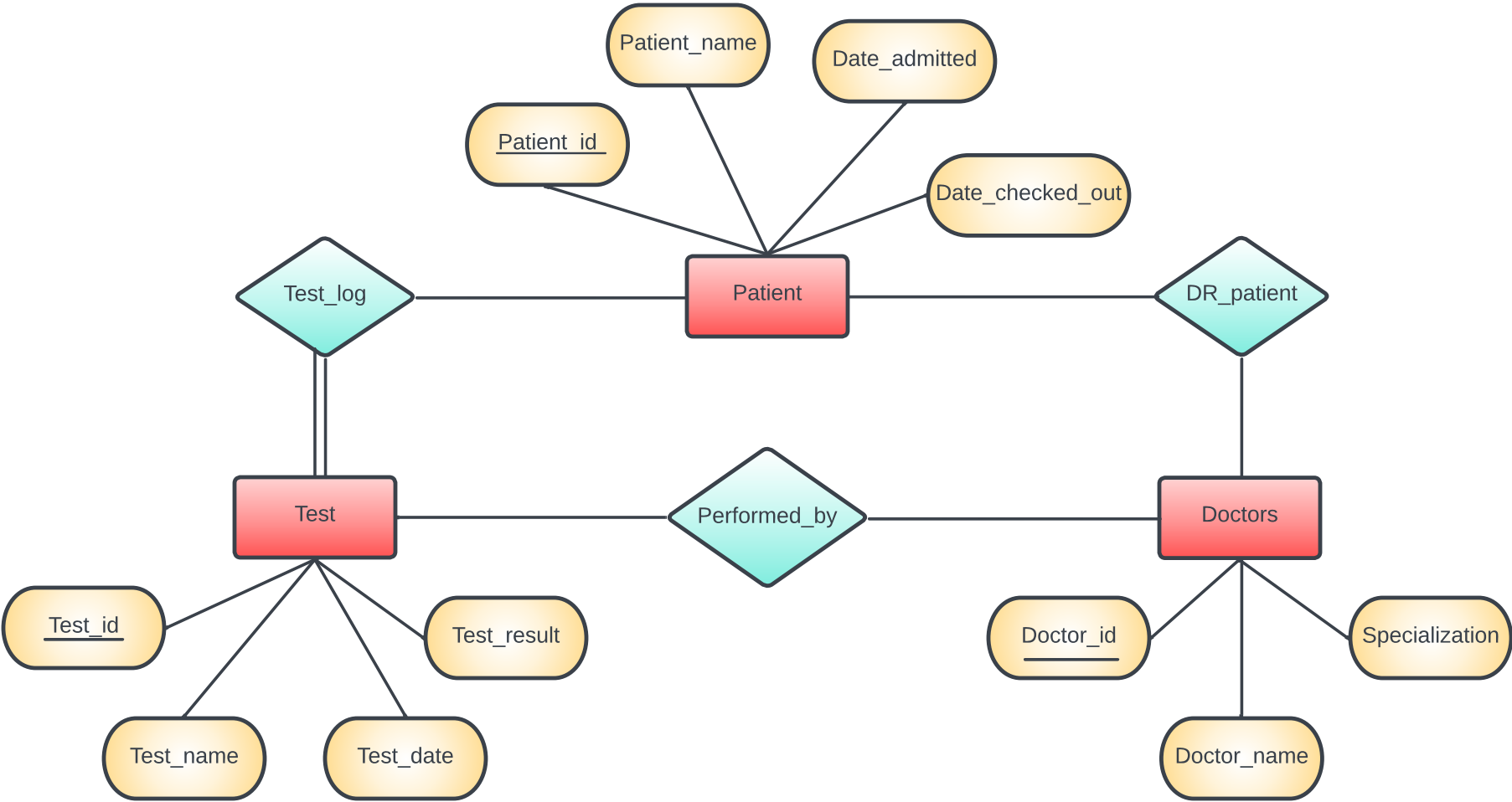
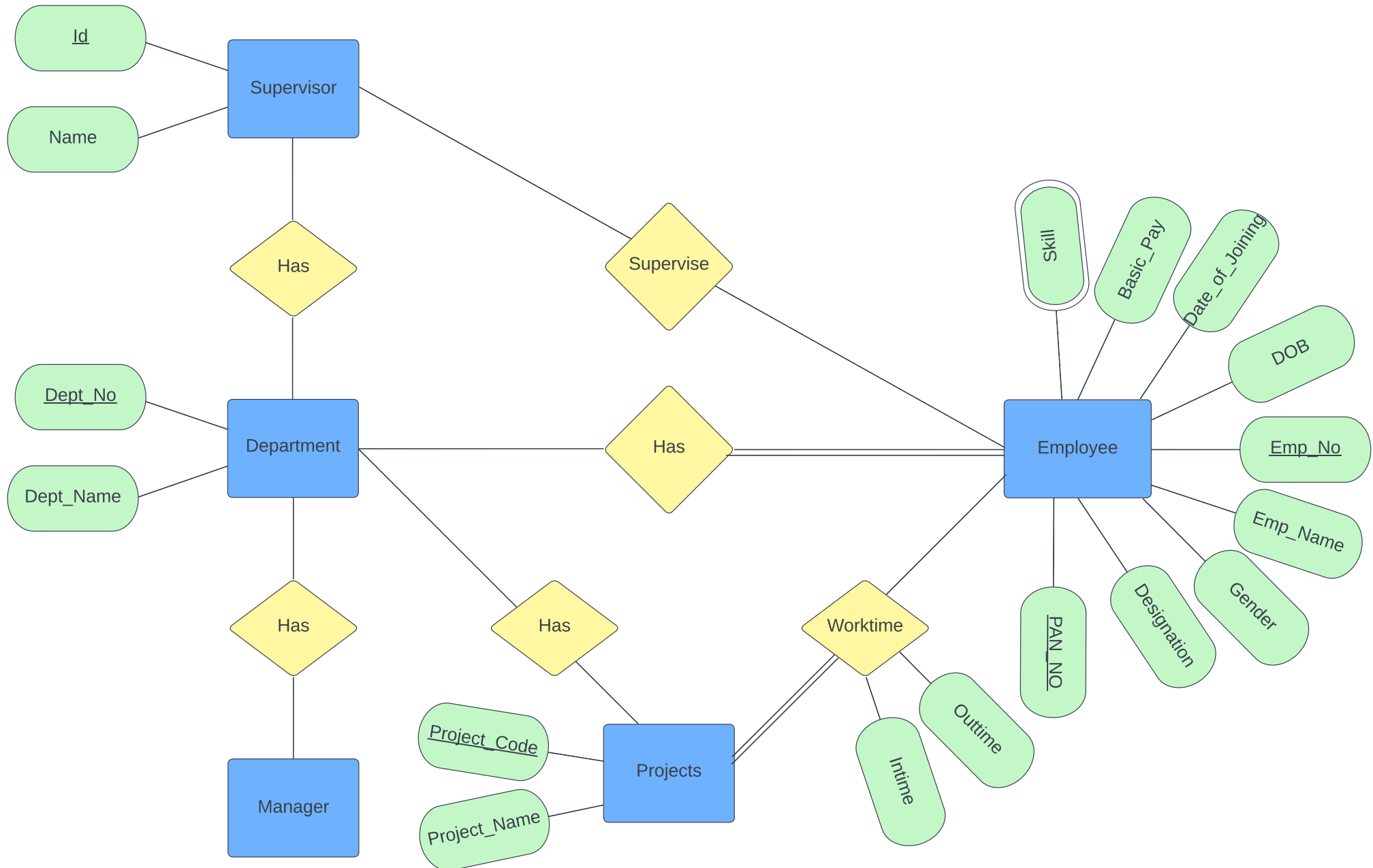


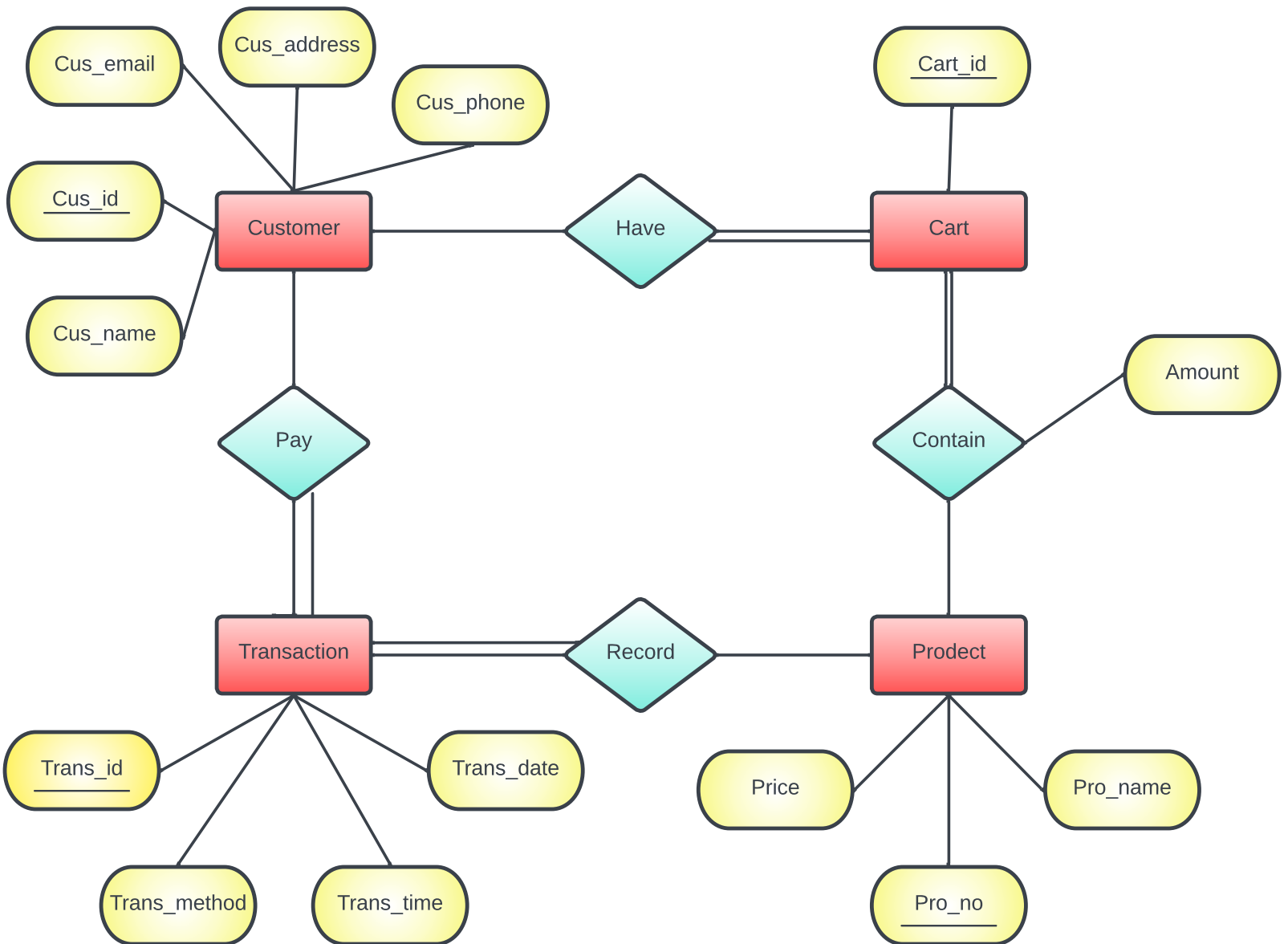
# HOSPITAL MANAGEMENT SYSTEM



# EMPLOYEE MANAGEMENT SYSTEM



# ONLINE SHOPPING MANAGEMENT SYSTEM



# **EMPLOYEE MANAGEMENT SYSTEM**

## **CREATION OF TABLE:**

### ***Supervisor:***

```
create table supervisor(  
    Id int not null unique,  
    Name varchar(30)  
);
```

CREATE TABLE

### ***Department:***

```
create table Department(  
    Dept_No int not null unique,  
    Dept_Name varchar(30)  
);
```

CREATE TABLE

### ***Projects:***

```
create table Projects(  
    Project_code int not null unique,  
    Project_Name varchar(30)  
);
```

CREATE TABLE

### ***Employee:***

```
create table Employee(  
    Emp_no int not null unique,  
    Emp_Name varchar(30),  
    Gender varchar(10),  
    Designation varchar(30),  
    PAN_NO varchar(30) not null unique,  
    DOB date,  
    Date_of_joining date,
```

```
Basic_pay int,  
Skill varchar(100)  
);
```

CREATE TABLE

## **CREATION OF RELATIONAL TABLE:**

### ***Department-Employee:***

```
create table rt_de(  
    Dept_no int,  
    Emp_no int,  
    Primary key(Emp_no),  
    constraint fk_emp  
    foreign key(Emp_no)  
    references employee(Emp_no),  
    constraint fk_dep  
    foreign key(Dept_no)  
    references department(Dept_no)  
);
```

CREATE TABLE

### ***Department-Supervisor:***

```
create table rt_ds(  
    Dept_no int,  
    Id int,  
    Primary key(Dept_no),  
    constraint fk_dep  
    foreign key(Dept_no)  
    references department(Dept_no),  
    constraint fk_sup  
    foreign key(ID)  
    references Supervisor(ID)
```

);

CREATE TABLE

***Employee-Supervisor:***

create table supervise(

Emp\_no int,

ID int,

Primary key(Emp\_no),

constraint fk\_emp

foreign key(Emp\_no)

references employee(Emp\_no),

constraint fk\_sup

foreign key(ID)

references Supervisor(ID)

);

CREATE TABLE

***Employee-Project:***

create table worktime(

Project\_code int,

Emp\_no int,

Intime date,

Outtime date,

primary key(Project\_code),

constraint fk\_pro

foreign key(Project\_code)

references projects(Project\_code),

constraint fk\_wrk

foreign key(Emp\_no)

references employee(Emp\_no)

);

CREATE TABLE

**Department-Project:**

```
create table rt_dp(  
    Dept_no int,  
    Project_code int,  
    primary key(Project_code),  
    constraint fk_dep  
    foreign key(Dept_no)  
    references department(Dept_no),  
    constraint fk_pro  
    foreign key(Project_code)  
    references projects(Project_code)  
);
```

CREATE TABLE

**INSERTION OF DATA IN TABLE:**

**Department:**

```
insert into department  
values(101,'HR'),(102,'Design'),(103,'Package'),(104,'Networking'),(105,'Production'),(106,'S  
ecurity'),(108,'Coding');
```

INSERT 0 7

```
select * from department;
```

	dept_no integer	dept_name character varying (30)
1	101	HR
2	102	Design
3	103	Package
4	104	Networking
5	105	Production
6	106	S ecurity
7	108	Coding

**Employee:**

```
insert into employee values(1,'Ratish','Male','Developer','QWERT1234Y','1999-05-03','2021-  
04-05',65000,'Vibing'),(2,'Karthikeyan','Male','HR','ERTYU3456V','2000-03-02','2022-06-  
05',75000,'Creativity'),
```

```
(3,'Thirumurugan','Male','Design','ERERT4546V','2000-01-02','2020-04-23',55000,'Creativity'),
(4,'Arun','Male','Cyber','RTGFT6746V','2001-02-04','2021-06-21',75000,'content_CREATOR'),
(5,'Ajay','Male','Coding','RQWCT6746V','2001-05-04','2021-06-22',85000,'Entertainer'),
(6,'Navas','Male','Coding','QWECT4567E','2001-04-21','2021-09-21',78000,'Creativity'),
(7,'Kabileshwaran','Male','Coding','ZXCVB4567E','2000-05-22','2021-10-22',85000,'supervisor');
```

INSERT 0 7

test=# select \* from employee;

	emp_no integer	emp_name character varying (30)	gender character varying (10)	designation character varying (30)	pan_no character varying (30)	dob date	date_of_joining date	basic_pay integer	skill character varying (100)
1	1	Ratish	Male	Developer	QWERT1234Y	1999-05-03	2021-04-05	65000	Vibing
2	2	Karthikeyan	Male	HR	ERTYU3456V	2000-03-02	2022-06-05	75000	Creativity
3	3	Thirumurugan	Male	Design	ERERT4546V	2000-01-02	2020-04-23	55000	Creativity
4	4	Arun	Male	Cyber	RTGFT6746V	2001-02-04	2021-06-21	75000	content_CREATOR
5	5	Ajay	Male	Coding	RQWCT6746V	2001-05-04	2021-06-22	85000	Entertainer
6	6	Navas	Male	Coding	QWECT4567E	2001-04-21	2021-09-21	78000	Creativity
7	7	Kabileshwaran	Male	Coding	ZXCVB4567E	2000-05-22	2021-10-22	85000	supervisor

### Projects:

```
insert into projects values(501,'Cloud Computing'),(502,'Criminology'),(503,'DBMS'),(504,'AI'),(505,'Robotics'),(506,'Drone');
```

INSERT 0 6

select \* from projects;

	project_code integer	project_name character varying (30)
1	501	Cloud Computing
2	502	Criminology
3	503	DBMS
4	504	AI
5	505	Robotics
6	506	Drone

### Supervisor:

```
insert into supervisor
values(1001,'Arun'),(1002,'Navas'),(1003,'Kabileshwaran'),(1004,'Ajay');INSERT 0 4
```

select \* from supervisor;

	id integer	name character varying (30)
1	1001	Arun
2	1002	Navas
3	1003	Kabileshwaran
4	1004	Ajay



## RELATIONAL TABLE:

### **Department-Employee:**

```
insert into rt_de values(102,1),(102,3),(108,7),(101,2);
```

```
INSERT 0 4
```

```
select * from rt_de;
```

	dept_no integer	emp_no [PK] integer
1	102	1
2	102	3
3	108	7
4	101	2

### **Department-Supervisor:**

```
insert into rt_ds values(101,1001),(102,1002),(103,1003),(104,1003);
```

```
INSERT 0 4
```

```
select * from rt_ds;
```

	dept_no [PK] integer	id integer
1	101	1001
2	102	1002
3	103	1003
4	104	1003

### **Worktime:**

```
insert into worktime values(501,1,'9:15','10:15'),(503,2,'10:15','12:00');
```

```
INSERT 0 2
```

```
select * from worktime;
```

	project_code [PK] integer	emp_no integer	intime time without time zone	outtime time without time zone
1	501	1	09:15:00	10:15:00
2	503	2	10:15:00	12:00:00

### **Department-Projects:**

```
insert into rt_dp values(106,501),(108,502),(106,503);
```

```
INSERT 0 3
```

```
select * from rt_dp;
```

	dept_no integer	project_code [PK] integer
1	106	501
2	108	502
3	106	503

### **Supervise:**

insert into supervise values(1,1001),(2,1001),(3,1002),(4,1002),(5,1003),(6,1004),(7,1004);

INSERT 0 7

select \* from supervise;

	emp_no [PK] integer	id integer
1	1	1001
2	2	1001
3	3	1002
4	4	1002
5	5	1003
6	6	1004
7	7	1004

### **QUERIES:**

#### **1) Add an record in projects table:**

insert into projects values(507,'UI');

INSERT 0 1

select \* from projects;

	project_code integer	project_name character varying (30)
1	501	Cloud Computing
2	502	Criminology
3	503	DBMS
4	504	AI
5	505	Robotics
6	506	Drone
7	507	UI

#### **2) Update Salary=85000 in Employee table where Name='Ajay':**

update employee set basic\_pay=85000 where emp\_name='Ajay';

UPDATE 1

Select \* from employee;

	emp_no integer	emp_name character varying (30)	gender character varying (10)	designation character varying (30)	pan_no character varying (30)	dob date	date_of_joining date	basic_pay integer	skill character varying (100)
1	1	Ratish	Male	Developer	QWERT1234Y	1999-05-03	2021-04-05	65000	Vibing
2	2	Karthikeyan	Male	HR	ERTYU3456V	2000-03-02	2022-06-05	75000	Creativity
3	3	Thirumurugan	Male	Design	ERERT4546V	2000-01-02	2020-04-23	55000	Creativity
4	4	Arun	Male	Cyber	RTGFT6746V	2001-02-04	2021-06-21	75000	content_CREATOR
5	6	Navas	Male	Coding	QWECT4567E	2001-04-21	2021-09-21	78000	Creativity
6	7	Kabileswaran	Male	Coding	ZXCVB4567E	2000-05-22	2021-10-22	85000	supervisor
7	5	Ajay	Male	Coding	RQWCT6746V	2001-05-04	2021-06-22	85000	Entertainer

**3)Delete an record in Projects table:**

delete from projects where project\_code=507;

DELETE 1

Select \* from projects;

	project_code integer	project_name character varying (30)
1	501	Cloud Computing
2	502	Criminology
3	503	DBMS
4	504	AI
5	505	Robotics
6	506	Drone

**4) Add a column Address in Supervisor table:**

alter table supervisor add column address varchar(30);

ALTER TABLE

Select \* from supervisor;

	id integer	name character varying (30)	address character varying (30)
1	1001	Arun	[null]
2	1002	Navas	[null]
3	1003	Kabileshtwaran	[null]
4	1004	Ajay	[null]

**5) Delete column Address in Supervisor table:**

alter table supervisor drop column address;

ALTER TABLE

Select \* from Supervisor;

	id integer	name character varying (30)
1	1001	Arun
2	1002	Navas
3	1003	Kabileshtwaran
4	1004	Ajay

**6) Write a query to find count of male employees in the Employee table:**

select COUNT(\*) from employee where gender='Male';

	count bigint
1	7

**7)Write a query to find the employee whose Salary is between 70000 and 100000:**

select emp\_name from employee where basic\_pay between 70000 and 100000;

	emp_name character varying (30) 🔒
1	Karthikeyan
2	Arun
3	Navas
4	Kabileshwaran
5	Ajay

**8)Write a query to display Employee name in upper case:**

select UPPER(emp\_name) from employee;

	upper text 🔒
1	RATISH
2	KARTHIK...
3	THIRUMU...
4	ARUN
5	NAVAS
6	KABILES...
7	AJAY

**9)Write a query to display Employee whose age is equal to 23:**

select emp\_name from employee where extract(year from age(current\_date,DOB))=23;

	emp_name character varying (30) 🔒
1	Ratish

**10)Write a query to find the employees working in the department 'HR':**

select emp\_name from employee where designation='HR';

	emp_name character varying (30) 🔒
1	Karthikeyan

**11)Write a query to retrieve first four characters of Employee from Employee table:**

select substr(emp\_name,1,4) as name from employee;

	name text
1	Rati
2	Kart
3	Thir
4	Arun
5	Nava
6	Kabi
7	Ajay

**12)Write a query to find Department which has linked with a Project in it:**

select dept\_name from department where dept\_no in (select dept\_no from rt\_dp);

	dept_name character varying (30)
1	S ecurity
2	Coding

**13)Write a query to find employees for the supervisor named 'Arun':**

select emp\_name from employee where emp\_no in(select emp\_no from supervise where id=(select id from supervisor where name='Arun'));

	emp_name character varying (30)
1	Ratish
2	Karthikeyan

**14)Write a query to find all female Employees in Employee table:**

select emp\_name from employee where gender='Female';

	emp_name character varying (30)

**15)Write a query to find all Employees whose name starts with 'K':**

select emp\_name from employee where emp\_name like 'K%';

	emp_name character varying (30)
1	Karthikeyan
2	Kabileswaran

**16) Create a new table which consist of the data of the Supervisor table:**

create table newtable as select \* from supervisor;

SELECT 4

select \* from newtable;

	id integer	name character varying (30)
1	1001	Arun
2	1002	Navas
3	1003	Kabileshwaran
4	1004	Ajay

**17) Write a query to find which Employee is getting high paid salary:**

select emp\_name from employee where basic\_pay=(select MAX(basic\_pay) from employee);

	emp_name character varying (30)
1	Kabileshwaran
2	Ajay

**18) Write a query to retrieve Emp name and Salary together as Name with Salary from Employee table:**

select CONCAT(emp\_name,' ',basic\_pay) as Name\_with\_Salary from employee;

	name_with_salary text
1	Ratish 65000
2	Karthikeyan 75000
3	Thirumurugan 55000
4	Arun 75000
5	Navas 78000
6	Kabileshwaran 85000
7	Ajay 85000

**19) Write a query to find the age of all employees in Employee table:**

select emp\_name,extract(year from age(current\_date,DOB))\*12 + extract(month from age(current\_date,DOB)) as age\_in\_month from employee;

	emp_name character varying (30) 🔒	age_in_month numeric 🔒
1	Ratish	282
2	Karthikeyan	272
3	Thirumurugan	274
4	Arun	261
5	Navas	258
6	Kabileshtwaran	269
7	Ajay	258

**20)Delete all records from newtable:**

truncate table newtable;

TRUNCATE TABLE





