

## Q.1) Practical Questions on PostgreSQL

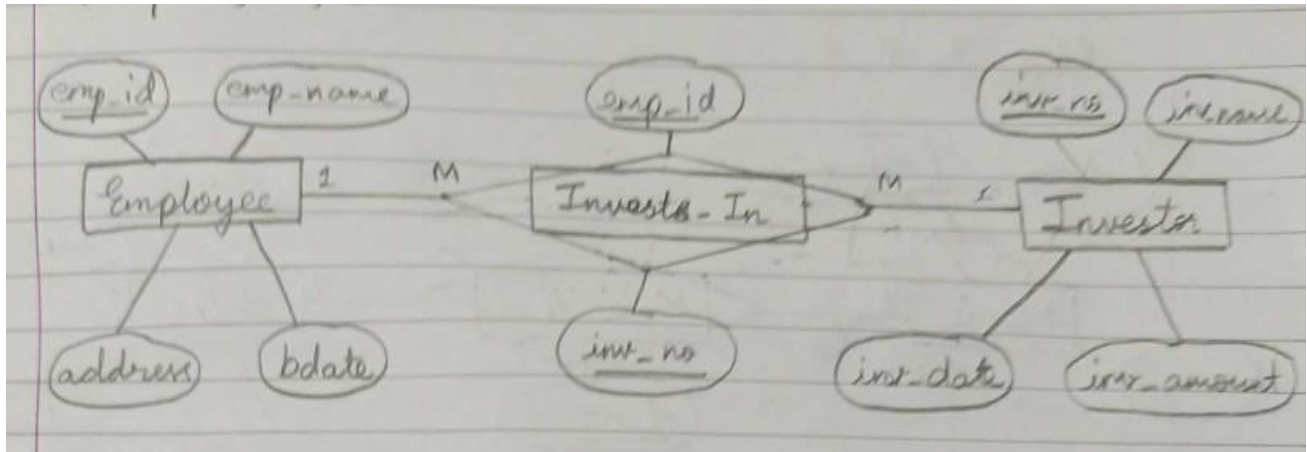
Consider the following database

Employee (emp\_id, emp\_name, address, bdate) Investor  
(inv\_no, inv\_name, inv\_date, inv\_amt)

An employee may invest in one or more investments; hence he can be an investor. But an investor need not be an employee of the firm.

Assume appropriate data types for all the attributes.

a) Draw the ER diagram for above relational schema and normalize it in 3NF.



b) Create the above database in 3NF form in PostgreSQL using constraints.

```
create table Employee(emp_id int primary key, emp_name varchar(20),address text,bdate date);
```

```
create table Investor(inv_no int primary key,inv_name varchar(20),inv_date date,inv_amount float);
```

```
create table Employeeinvestor(emp_id int references employee(emp_id), inv_no int  
references investor(inv_no), primary key(emp_id,inv_no));
```

```
insert into Employee values(1,'nikita','warora','2005-06-14'),(2,'tejaswee','dighi','2005-01-  
23'),(3,'mrudula','pune','2005-08-16'), (4,'prachi','nagpur','2005-08 -10'),(5,'manshi','chandrapur','2005-04-15');
```

```
insert into Investor values(101,'manasvi','2024-04-23',10000),(102,'pranjali','2024-02-  
12',20000),(103,'ranveer','2024-04-11',40000),(104,'ragav','2024-09-23',45000),  
(105,'payal','2024-11-21',33000);
```

```
insert into Employeeinvestor values(1,101),(2,102),(3,103),(4,104),(5,105);
```

Q2.) Using above database, solve the following queries:

a) List the distinct names of customers who are either employees, or investors or both.

```
SELECT DISTINCT emp_name FROM employee UNION SELECT DISTINCT inv_name FROM investor;
```

b) List the employees who are living in pune.

```
SELECT emp_name FROM Employee WHERE address = 'Pune';
```

c) Find the count of employee area wise.

```
SELECT address, COUNT(*) AS employee_count FROM Employee GROUP BY address;
```

d) Delete information of Investors whose amount is less than 10,000.

```
DELETE FROM Investor WHERE inv_amt < 10000;
```