

### Problem statement :

Create a bank database with following tables:

Branch master(branch\_id,branch\_name)

Employee master(emp\_no,emp\_name,branch\_id,salary,Dept,manager\_id) (manager\_id & branch\_id is foreign key)

Contact details(emp\_id,email\_id,phone\_no) (Apply on delete set null constraint & foreign key on emp\_id)

EmpAddress details(emp\_id,street,city,state) (Apply on delete set cascade constraint & foreign key on emp\_id)

Branch address(branch\_id,city,state)(branch\_id is foreign key)

1. Insert 5 records in each table.

```
select * from Branchmaster;
```

```
+-----+-----+
| branch_id | branch_name |
+-----+-----+
| 1 | Vadgaon |
| 2 | Park street |
| 3 | Panvel |
| 4 | Pimpri |
| 5 | Model colony |
+-----+-----+
```

5 rows in set (0.00 sec)

```
select * from Empmaster;
```

```
+-----+-----+-----+-----+-----+-----+
| emp_id | emp_name | branch_id | salary | dept | manager_id |
+-----+-----+-----+-----+-----+-----+
| 10 | Aryan | 2 | 40000 | Manager | NULL |
| 11 | Kiran | 4 | 5000 | Admin | 10 |
| 12 | Carol | 1 | 60000 | Assistant | 10 |
| 13 | Peter | 3 | 120000 | Senior | 10 |
| 14 | Bob | 5 | 110000 | HR | 10 |
+-----+-----+-----+-----+-----+-----+
```

5 rows in set (0.00 sec)

```
select * from contactdetails;
```

```
+-----+-----+-----+
| emp_id | email_id | phone_no |
+-----+-----+-----+
| 11 | kiran@gmail.com | 9890154761 |
| 10 | aryan@gmail.com | 8806058754 |
| 13 | peter@hotmail.c | 9373203456 |
+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
select * from Branchaddress;
```

```
+-----+-----+-----+
```

branch_id	city	state
1	Pune	Maharashtra
2	Kolkata	West Bengal
3	Mumbai	Maharashtra
4	Bangalore	Karnataka
5	Cuttack	Orissa

5 rows in set (0.00 sec)

```
select * from Empaddressdetails;
```

emp_id	street	city	state
10	vadgaon	Pune	Maharashtra
11	Link Road	Mumbai	Maharashtra
12	Park stree	Kolkata	West Bengal
13	Roha	Bangalore	Karnataka
14	Street roa	Cuttack	Orissa

5 rows in set (0.00 sec)

**2. List the employee details along with branch name using the inner join and in the order of emp\_no.**

```
select emp_id,emp_name,branch_name from Empmaster e inner join Branchmaster b on e.branch_id=b.branch_id order by emp_id;
```

emp_id	emp_name	branch_name
10	Aryan	Park street
11	Kiran	Pimpri
12	Carol	Vadgaon
13	Peter	Panvel
14	Bob	Model colony

5 rows in set (0.02 sec)

**3. List the details of employee who belong to admin department along with the branch name to which they belong.**

```
select emp_name,dept,branch_name from Branchmaster b,Empmaster e where b.branch_id=e.branch_id and dept="Admin";
```

emp_name	dept	branch_name
Kiran	Admin	Pimpri

1 row in set (0.00 sec)

**4. List the employee name along with the phone no and city using inner join.**

```
select emp_name,phone_no,city from Empmaster e inner join Empaddressdetails a on e.emp_id=a.emp_id inner join contactdetails c on e.emp_id=c.emp_id;
```

emp_name	phone_no	city
----------	----------	------

```
+-----+-----+-----+
| Aryan | 8806058754 | Pune |
| Kiran | 9890154761 | Mumbai |
| Peter | 9373203456 | Bangalore |
+-----+-----+-----+
```

3 rows in set (0.00 sec)

**5. List the employee name with the contact details (if any).**

```
select emp_name,email_id,phone_no from Empmaster e left join contactdetails c on
e.emp_id=c.emp_id;
```

```
+-----+-----+-----+
| emp_name | email_id | phone_no |
+-----+-----+-----+
| Aryan | aryan@gmail.com | 8806058754 |
| Kiran | kiran@gmail.com | 9890154761 |
| Bob | NULL | NULL |
+-----+-----+-----+
```

3 rows in set (0.00 sec)

**6. List the employee contact details irrespective of whether they are working or have left.**

```
delete from Empmaster where emp_id=12;
```

Query OK, 1 row affected (0.04 sec)

```
mysql> delete from Empmaster where emp_id=13;
```

Query OK, 1 row affected (0.03 sec)

```
mysql> select * from Empmaster;
```

```
+-----+-----+-----+-----+-----+
| emp_id | emp_name | branch_id | salary | dept | manager_id |
+-----+-----+-----+-----+-----+
| 10 | Aryan | 2 | 40000 | Manager | NULL |
| 11 | Kiran | 1 | 20000 | Admin | 10 |
| 14 | Bob | 5 | 110000 | HR | 10 |
+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
select emp_name,email_id,phone_no from Empmaster e right join contactdetails c on
e.emp_id=c.emp_id;
```

```
+-----+-----+-----+
| emp_name | email_id | phone_no |
+-----+-----+-----+
| Kiran | kiran@gmail.com | 9890154761 |
| Aryan | aryan@gmail.com | 8806058754 |
| NULL | peter@hotmail.c | 9373203456 |
+-----+-----+-----+
```

3 rows in set (0.00 sec)

**7. Retrieve the employee name and their respective manager name.**

```
select e1.emp_name,e2.emp_name as Manager from Empmaster e1,Empmaster e2 where
e1.manager_id=e2.emp_id;
```

```
+-----+-----+
| emp_name | Manager |
+-----+-----+
| Kiran | Aryan |
```

emp_name	dept	branch_name	salary
Bob	HR	Model colony	110000
Aryan	Manager	Park street	40000

2 rows in set (0.00 sec)

**8. List the employee details along with branch name using natural join.**

select emp\_name,dept,branch\_name,salary from Branchmaster b natural join Empmaster e;

emp_name	dept	branch_name	salary
Aryan	Manager	Park street	40000
Kiran	Admin	Pimpri	20000
Bob	HR	Model colony	110000

3 rows in set (0.00 sec)

**9. List the employee names who work at the vadgaon branch along with the city of that employee.**

select e.emp\_id,emp\_name,city from Empmaster e,Branchmaster b,Empaddressdetails a where b.branch\_name="Vadgaon" and b.branch\_id=e.branch\_id and e.emp\_id=a.emp\_id;

emp_id	emp_name	city
11	Kiran	Mumbai

1 row in set (0.00 sec)

**10. Find the employee who works at the vadgaon branch with salary>10000 and list the employee names with streets and city they live in.**

select emp\_name,street,city,salary from Empmaster e,Empaddressdetails a where e.emp\_id=a.emp\_id and e.emp\_id in(select emp\_id from Branchmaster b,Empmaster c where branch\_name="Vadgaon" and salary>10000 and b.branch\_id=c.branch\_id);

emp_name	street	city	salary
Kiran	Link Road	Mumbai	20000

1 row in set (0.00 sec)

**11. Find the employees who live and work in same city.**

select emp\_name from Empmaster e,Branchmaster b,Empaddressdetails a,Branchaddress c where e.emp\_id=a.emp\_id and b.branch\_id=e.branch\_id and c.branch\_id=b.branch\_id and c.city=a.city;

emp_name
Bob

1 row in set (0.00 sec)

**12. Find the employees whose salaries are more than everybody who works at branch vadgaon.**

select emp\_name from Empmaster where salary>all(select salary from Empmaster e,Branchmaster b where e.branch\_id=b.branch\_id and branch\_name="Vadgaon");

emp_name
Aryan

```
| Bob |
+-----+
```

2 rows in set (0.00 sec)

**13. Create a view which will contain total employees at each branch.**

create view TotEmp as select branch\_name,count(emp\_id) as TotalEmployees from  
Empmaster e,Branchmaster b where e.branch\_id=b.branch\_id group by e.branch\_id;  
Query OK, 0 rows affected (0.04 sec)

```
mysql> select * from TotEmp;
+-----+-----+
| branch_name | TotalEmployees |
+-----+-----+
| Vadgaon     | 1              |
| Park street | 1              |
| Panvel      | 1              |
| Pimpri      | 3              |
| Model colony | 1              |
+-----+-----+
5 rows in set (0.00 sec)
```

**14. List the branch names where employee have a salary>100000.**

select branch\_name from Empmaster e,Branchmaster b where e.branch\_id=b.branch\_id  
and salary>100000;

```
+-----+
| branch_name |
+-----+
| Model colony |
+-----+
1 row in set (0.00 sec)
```

**15. Create a view which will show the avg salary and the total salary at each branch.**

create view Emp as select branch\_name,avg(salary),sum(salary) from Empmaster  
e,Branchmaster b where e.branch\_id=b.branch\_id group by e.branch\_id;  
Query OK, 0 rows affected (0.05 sec)

```
mysql> select * from Emp;
+-----+-----+-----+
| branch_name | avg(salary) | sum(salary) |
+-----+-----+-----+
| Vadgaon     | 20000.0000  | 20000       |
| Park street | 40000.0000  | 40000       |
| Panvel      | 12000.0000  | 12000       |
| Pimpri      | 14000.0000  | 42000       |
| Model colony | 110000.0000 | 110000      |
+-----+-----+-----+
5 rows in set (0.03 sec)
```

**16. Find the employee who do not have a job at vadgaon branch.**

select emp\_name from Empmaster e,Branchmaster b where e.branch\_id=b.branch\_id and  
e.branch\_id not in(select branch\_id from Branchmaster where branch\_name="vadgaon");

```
17. +-----+
18. | emp_name |
19. +-----+
```

```
20. | Aryan |
21. | Nil   |
22. | Yog   |
23. | Yog   |
24. | Yog   |
25. | Bob   |
26. +-----+
27. 6 rows in set (0.00 sec)
```