

# WEEK 8

```
create database airline_040;  
use airline_040;
```

```
create table flights(  
  fl_num int primary key,  
  fro varchar(30),  
  too varchar(30),  
  distance int,  
  depart time,  
  arrive time,  
  price int  
);
```

```
create table aircraft(  
  aid int primary key,  
  aname varchar(30),  
  c_range int  
);
```

```
create table employee(  
  eid int primary key,  
  ename varchar(20),  
  salary int  
);
```

```
create table certified(  
  eid int,  
  aid int,  
  foreign key(eid) references employee(eid),  
  foreign key(aid) references aircraft(aid)  
);
```

insert into flights values (1,'Bengalure','New Delhi',500,'6:00','9:00',5000);  
insert into flights values (2,'Bengalure','Chennai',300,'7:00','8:30',3000);  
insert into flights values (3,'Trivandrum','New Delhi',800,'8:00','11:30',6000);  
insert into flights values  
(4,'Bengalure','Frankfurt',10000,'6:00','23:30',50000);  
insert into flights values (5,'Kolkata','New Delhi',2400,'11:00','3:30',9000);  
insert into flights values (6,'Bengalure','Frankfurt',8000,'9:00','23:00',40000);

insert into aircraft values (1,'Airbus',2000);  
insert into aircraft values (2,'Boeing',700);  
insert into aircraft values (3,'Jetairways',550);  
insert into aircraft values (4,'Indigo',5000);  
insert into aircraft values (5,'Boeing',4500);  
insert into aircraft values (6,'Airbus',2200);

insert into employee values (101,'Avinash',50000);  
insert into employee values (102,'Lokesh',60000);  
insert into employee values (103,'Rakesh',70000);  
insert into employee values (104,'Santhosh',82000);  
insert into employee values (105,'Tilak',5000);

insert into certified values (101,2);  
insert into certified values (101,4);  
insert into certified values (101,5);  
insert into certified values (101,6);  
insert into certified values (102,1);  
insert into certified values (102,3);  
insert into certified values (102,5);  
insert into certified values (103,2);  
insert into certified values (103,3);  
insert into certified values (103,5);

insert into certified values (103,6);  
insert into certified values (104,6);  
insert into certified values (104,1);  
insert into certified values (104,3);  
insert into certified values (105,3);

select\* from flights;

72 • `select* from flights;`

|   | fl_num | fro        | too       | distance | depart   | arrive   | price |
|---|--------|------------|-----------|----------|----------|----------|-------|
| ▶ | 1      | Bengalure  | New Delhi | 500      | 06:00:00 | 09:00:00 | 5000  |
|   | 2      | Bengalure  | Chennai   | 300      | 07:00:00 | 08:30:00 | 3000  |
|   | 3      | Trivandrum | New Delhi | 800      | 08:00:00 | 11:30:00 | 6000  |
|   | 4      | Bengalure  | Frankfurt | 10000    | 06:00:00 | 23:30:00 | 50000 |
|   | 5      | Kolkata    | New Delhi | 2400     | 11:00:00 | 03:30:00 | 9000  |
|   | 6      | Bengalure  | Frankfurt | 8000     | 09:00:00 | 23:00:00 | 40000 |
| * | NULL   | NULL       | NULL      | NULL     | NULL     | NULL     | NULL  |

select\* from aircraft;

74 • `select* from aircraft;`

|   | aid  | aname      | c_range |
|---|------|------------|---------|
| ▶ | 1    | Airbus     | 2000    |
|   | 2    | Boeing     | 700     |
|   | 3    | Jetairways | 550     |
|   | 4    | Indigo     | 5000    |
|   | 5    | Boeing     | 4500    |
|   | 6    | Airbus     | 2200    |
| * | NULL | NULL       | NULL    |

select\* from employee;

76 • `select* from employee;`

Result Grid | Filter Rows:  | Edit:

|   | eid  | ename    | salary |
|---|------|----------|--------|
| ▶ | 101  | Avinash  | 50000  |
|   | 102  | Lokesh   | 60000  |
|   | 103  | Rakesh   | 70000  |
|   | 104  | Santhosh | 82000  |
|   | 105  | Tilak    | 5000   |
| * | NULL | NULL     | NULL   |

select\* from certified;

79 • `select* from certified;`

80

Result Grid | Filter Rows:  | Export: W

|   | eid | aid |
|---|-----|-----|
| ▶ | 101 | 2   |
|   | 101 | 4   |
|   | 101 | 5   |
|   | 101 | 6   |
|   | 102 | 1   |
|   | 102 | 3   |
|   | 102 | 5   |
|   | 103 | 2   |
|   | 103 | 3   |
|   | 103 | 5   |
|   | 103 | 6   |
|   | 104 | 6   |
|   | 104 | 1   |
|   | 104 | 3   |
|   | 105 | 3   |

TO DO

1)select a.aname from aircraft a  
where a.aid in(select c.aid from certified c where c.eid in(select e.eid from  
employee e where e.salary>=80000));

```

81 • select a.aname from aircraft a
82 where a.aid in(select c.aid from certified c where c.eid in(select e.eid from employee e where e.salary>=80000));
83

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [I](#)

| aname      |
|------------|
| Airbus     |
| Jetairways |
| Airbus     |

2)select e.eid, max(c\_range)  
from employee e inner join certified c  
on e.eid=c.eid inner join aircraft a  
on c.aid=a.aid  
group by eid  
having count(c.eid)>=3;

```

84 • select e.eid, max(c_range)
85 from employee e inner join certified c
86 on e.eid=c.eid inner join aircraft a
87 on c.aid=a.aid
88 group by eid
89 having count(c.eid)>=3;
90

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [I](#)

| eid | max(c_range) |
|-----|--------------|
| 101 | 5000         |
| 102 | 4500         |
| 103 | 4500         |
| 104 | 2200         |

3)select e.ename  
from employee e  
where salary<(select min(price)  
from flights  
where fro="Bengalure" and too="Frankfurt");

```

94 • select e.ename
95 from employee e
96 where salary < (select min(price)
97 from flights
98 where fro="Bengalure" and too="Frankfurt");
99

```

---

| Result Grid |  |
|-------------|--|
| ename       |  |
| ▶ Tilak     |  |

4)select aname ,avg(salary)  
from aircraft a inner join certified c  
on a.aid=c.aid inner join employee e  
on e.eid=c.eid  
where a.c\_range>1000  
group by a.aid;

```

101 • select aname ,avg(salary)
102 from aircraft a inner join certified c
103 on a.aid=c.aid inner join employee e
104 on e.eid=c.eid
105 where a.c_range>1000
106 group by a.aid;
107

```

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| Result Grid |             |  |
|-------------|-------------|--|
| aname       | avg(salary) |  |
| ▶ Airbus    | 71000.0000  |  |
| Indigo      | 50000.0000  |  |
| Boeing      | 60000.0000  |  |
| Airbus      | 67333.3333  |  |

5)select ename  
from employee  
where eid in(select eid from certified where aid in(select aid from aircraft  
where aname="Boeing"));

```

112 • select ename
113 from employee
114 where eid in(select eid from certified where aid in(select aid from aircraft where aname="Boeing"));
115

```

| Result Grid |         |
|-------------|---------|
|             | ename   |
| ▶           | Avinash |
|             | Lokesh  |
|             | Rakesh  |

6)select aid from aircraft where c\_range >=(select distance from flights where fro="Bengalure" and too="New Delhi");

```

120 • select aid from aircraft where c_range >=(select distance from flights where fro="Bengalure" and too="New Delhi");
121

```

| Result Grid |      |
|-------------|------|
|             | aid  |
| ▶           | 1    |
|             | 2    |
|             | 3    |
|             | 4    |
|             | 5    |
|             | 6    |
| *           | NULL |