Swastik_week8_dbms

```
create database airlineflight;
use airlineflight;

create table FLIGHT(
flno int(5),
ffrom varchar(20),
tto varchar(20),
distance int(10),
departs time,
arrives time,
price int(10),
primary key(flno));

create table AIRCRAFT(
aid int(10),
aname varchar(20),
cruising_range int(10),
primary key(aid));

create table EMPLOYEE(
eid int(10),
ename varchar(20),
salary int(10),
primary key(eid)
);

create table CERTIFIED(
eid int(10),
aid int(10),
foreign key(aid) references AIRCRAFT(aid),
foreign key(eid) references EMPLOYEE(eid));

insert into FLIGHT values(1,'bengaluru','newdelhi',500,'6:00','9:00',5000),
(2,'bengaluru','chennai',300,'7:00','8:30',3000),
(3,'trivandrum','newdelhi',800,'8:00','11:30',6000),
(4,'bengaluru','frankfurt',10000,'6:00','23:30',50000),
(5,'kolkata','newdelhi',2400,'11:00','3:30',9000),
(6,'bengaluru','frankfurt',8000,'9:00','23:00',40000);

insert into AIRCRAFT values
(1,'airbus',2000),(2,'boeing',700),
(3,'jetairways',550),(4,'indigo',5000),
```

(5,'boeing',4500),(6,'airbus',2200);

insert into EMPLOYEE values
(101,'avinash',50000),
(102,'lokesh;',60000),
(103,'rakesh',70000),
(104,'santosh',82000),
(105,'tilak',5000);

insert into CERTIFIED values
(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);

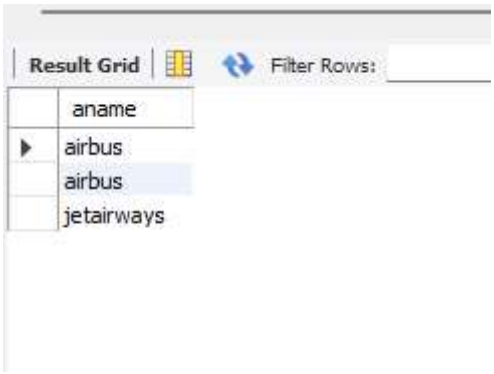
alter table CERTIFIED
add constraint
foreign key(aid) references aircraft(aid) on update cascade on delete cascade ;

alter table CERTIFIED
add constraint
foreign key(eid) references EMPLOYEE(eid) on update cascade on delete cascade;

i. Find the names of aircraft such that all pilots certified to operate them have salaries more than

Rs.80,000.

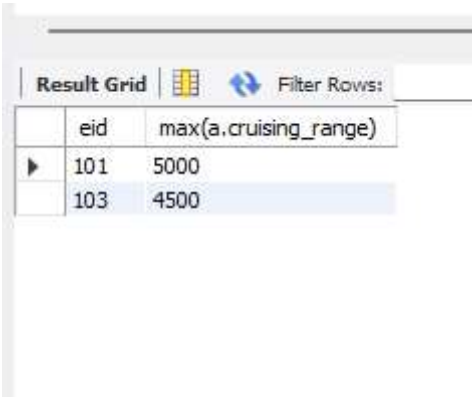
select a.aname
from AIRCRAFT a,certified c,employee e
where a.aid=c.aid and c.eid=e.eid and e.salary > 80000;



ii. For each pilot who is certified for more than three aircrafts, find the eid and the maximum

cruisingrange of the aircraft for which she or he is certified.

```
select c.eid, max(a.cruising_range)
from certified c, aircraft a
where c.aid=a.aid
group by c.eid having count(c.aid)>3;
```



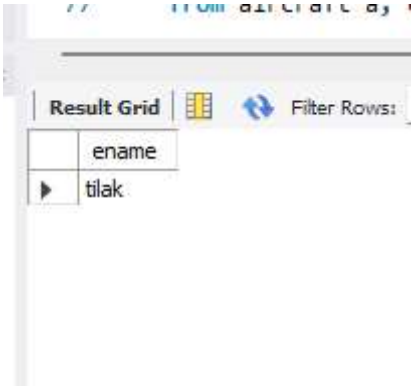
Result Grid | Filter Rows:

eid	max(a.cruising_range)
101	5000
103	4500

iii. Find the names of pilots whose salary is less than the price of the cheapest route from

Bengaluru to Frankfurt.

```
select ename from employee
where salary<(select min(price) from flight
        where ffrom='bengaluru'and tto='frankfurt');
```

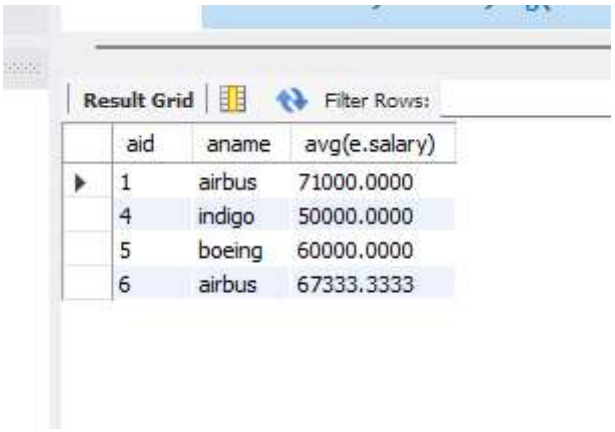


Result Grid | Filter Rows:

ename
tilak

iv. For all aircraft with cruising range over 1000 Kms, find the name,id of the aircraft and the average salary of all pilots certified for this aircraft.

```
select a.aid,a.aname,avg(e.salary)
from aircraft a, certified c,employee e
where a.aid=c.aid and c.eid= e.eid and a.cruising_range>1000
group by a.aid;
```

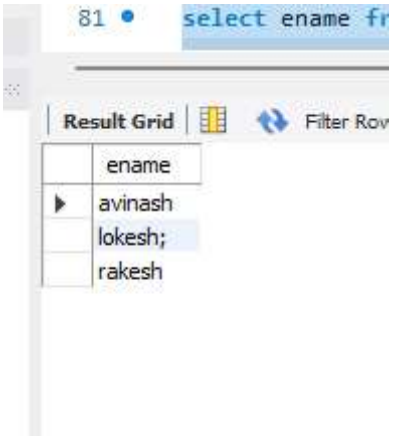


Result Grid | Filter Rows:

aid	aname	avg(e.salary)
1	airbus	71000.0000
4	indigo	50000.0000
5	boeing	60000.0000
6	airbus	67333.3333

v. Find the names of pilots certified for some Boeing aircraft.

```
select ename from employee
where eid in (select c.eid from certified c, aircraft a where c.aid=a.aid and a.aname='boeing');
```



81 • select ename fr

Result Grid | Filter Rov

ename
avinash
lokesh;
rakesh

vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.

```
select a.aid
from aircraft a
where a.cruising_range>(select distance
                        from flight where ffrom='bengaluru' and tto='newdelhi');
```