FLIGHT DATABASE

WEEK 8

INPUT:

```
create database Airline;
use Airline;
create table Flights(
FLno int primary key,
Ffrom varchar(50),
Tto varchar(50),
Distance int,
Departs time,
Arrives time,
Price int);

create table Aircraft(
Aid int primary key,
Aname varchar(50),
Cruising_range int);

create table Employee(
Eid int primary key,
```

```
Ename varchar(50),
Salary int);

create table Certified(
Eid int,
Aid int,
foreign key(Aid) references Aircraft(Aid) on update cascade
on delete cascade,
foreign key(Eid) references Employee(Eid) on update cascade
on delete cascade);


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

insert into Aircraft values
(1,'Airbus',2000),
(2,'Boeing',700),
(3,'JetAirways',550),
```

(4,'Indigo',5000),
(5,'Boeing',4500),
(6,'Airbus',2200);

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);

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

QUERIES:

1) Find the names of aircraft such that all pilots certified to operate them have salaries more than Rs.80,000.

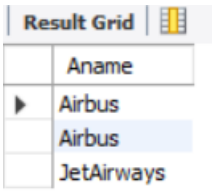
INPUT:

select A.Aname from Aircraft A,Certified C,Employee E

where A.Aid=C.Aid and C.Eid=E.Eid and not existS(select *from Employee E1

where E1.Eid=E.Eid and E1.salary<80000);

OUTPUT:



Result Grid

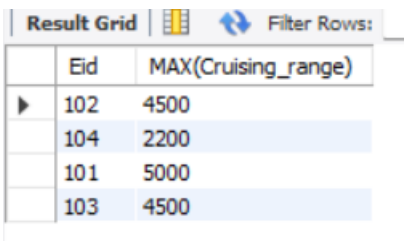
Aname
Airbus
Airbus
JetAirways

2) 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.

INPUT:

select C.Eid,MAX(Cruising_range) from Certified C,Aircraft A where C.Aid=A.Aid group by C.Eid having COUNT(*)>2;

OUTPUT:



Result Grid Filter Rows:

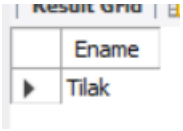
Eid	MAX(Cruising_range)
102	4500
104	2200
101	5000
103	4500

3) Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru to Frankfurt.

INPUT:

```
select distinctE.Ename from Employee E
where E.salary <(select MIN(f.price) from Flights F
where F.Ffrom='Banglore' and F.Tto='Frankfurt');
```

OUTPUT:



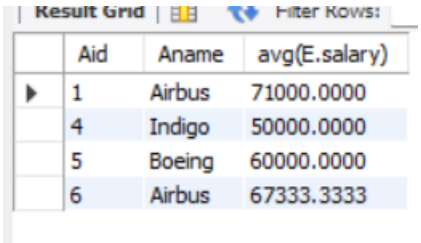
	Ename
▶	Tilak

4) For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the Average salary of all pilots certified for this aircraft.

INPUT:

```
select A.Aid, A.Aname,avg(E.salary) from Aircraft A,
Employee E, Certified C
where A.Aid=C.Aid and C.Eid=E.Eid and
A.Cruising_range>1000 group by A.Aid, A.Aname;
```

OUTPUT:



Result Grid | Filter Rows:

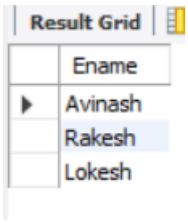
	Aid	Aname	avg(E.salary)
▶	1	Airbus	71000.0000
	4	Indigo	50000.0000
	5	Boeing	60000.0000
	6	Airbus	67333.3333

5) Find the names of pilots certified for some Boeing aircraft.

INPUT:

```
select distinct E.Ename
from Employee E,Aircraft A,Certified C
where E.Eid=C.Eid and C.Aid=A.Aid and
A.Aname='Boeing';
```

OUTPUT:



Result Grid

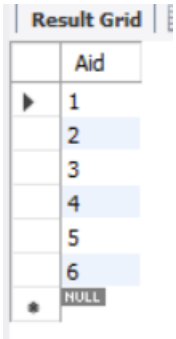
	Ename
▶	Avinash
	Rakesh
	Lokesh

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

INPUT:

```
select A.Aid from Aircraft A
where A.Cruising_range>(select MIN(F.Distance) from
Flights F where F.Ffrom='Banglore' and F.Tto='New Delhi');
```

OUTPUT:



Result Grid

	Aid
▶	1
	2
	3
	4
	5
	6
*	NULL

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