WEEK 8

VIBHA HUGAR CS255

CREATION

```
create database airline;
use airline;
create table flights(
flno int,
from_varchar(20),
to_varchar(20),
distance int,
departs time,
arrives time,
price int,
PRIMARY KEY(flno)
);
create table aircraft(
aid int,
aname varchar(20),
cruisingRange int,
PRIMARY KEY(aid)
);
create table employee(
eid int,
ename varchar(20),
salary int,
PRIMARY KEY(eid)
);
```

```
create table certified(
eid int,
aid int,
FOREIGN KEY(eid) REFERENCES employee(eid) on update
cascade on delete cascade,
FOREIGN KEY(aid) REFERENCES aircraft(aid) on update cascade
on delete cascade
);
INSERTION
insert into flights
values(1,'Bengaluru','NewDelhi',500,'06:00','09:00',5000),(2,'Bengaluru','Chennai',300,'07:00','08:30'
,3000),(3,'Trivandrum','NewDelhi',800,'08:00','11:30',6000),
(4, 'Bengaluru', 'Frankfurt', 10000, '06:00', '23:30', 50000), (5, 'Kolkata', 'NewDelhi', 2400, '11:00', '03:30', 90
00),(6,'Bengaluru','Frankfurt',8000,'09:00','23:00',40000);
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,'Air
bus',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),(1
04,1),(104,3),(105,3);
select * from employee;
```



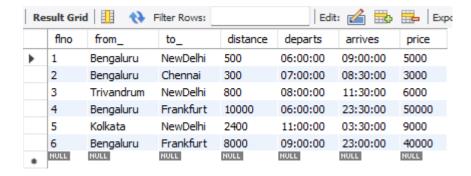
select * from aircraft;

	aid	aname	cruisingRange
•	1	Airbus	2000
	2	Boeing	700
	3	JetAirways	550
	4	Indigo	5000
	5	Boeing	4500
	6	Airbus	2200
	NULL	NULL	NULL

select * from certified;

Result Grid		
	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

select * from flights;



QUERY i

select (a.aname) from employee e inner join certified c on e.eid=c.eid and e.salary>80000 inner join aircraft a on a.aid=c.aid;



QUERY ii

select c.eid, max(a.cruisingRange) as maxrange

from aircraft a, certified c

where c.aid=a.aid group by c.eid having count(*)>=3;



QUERY iii

select ename from employee where salary<any(select price

from flights where from_='Bengaluru' and to_='Frankfurt');



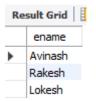
QUERY iv

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

	aid	aname	AVG(e.salary)
•	1	Airbus	71000.0000
	4	Indigo	50000.0000
	5	Boeing	60000.0000
	6	Airbus	67333.3333

$\mathbf{QUERY} \ \mathbf{v}$

select distinct e.ename from employee e, certified c, aircraft a where a.aid=c.aid and e.eid=c.eid and a.aname='Boeing';



QUERY vi

select a.aid from flights f, aircraft a where (f.from_='Bengaluru' and f.to_='NewDelhi') and f.distance<=a.cruisingRange;

	aid	
•	1	
	2	
	3	
	4	
	5	
	6	