

## AIRLINE DATABASE VAISHNAVI KAMATH

```
create database airlinevck;

use airlinevck;

create table flights(
    flno integer,
    ffrom varchar(20),
    tto varchar(20),
    distance integer,
    depart time,
    arrive time,
    price integer,
    primary key(flno));

create table aircraft(
    aid integer,
    aname varchar(20),
    cru_range integer,
    primary key(aid));

create table employees(
    eid integer,
    ename varchar(20),
    salary integer,
    primary key(eid));

create table certified(
    eid integer,
    aid integer,
    primary key(eid,aid),
    foreign key(eid) references employees(eid) on update cascade on delete cascade,
    foreign key(aid) references aircraft(aid) on update cascade on delete cascade);

insert into employees 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,'Jet
airways',550),(4,'Indigo',5000),(5,'Boeing',4500),(6,'Airbus',2200);
```

```
insert into flights values(1,'Bengaluru','New Delhi',500,'06:00:00','09:00:00',5000);
```

```
insert into flights
```

```
values(2,'Bengaluru','Chennai',300,'07:00:00','08:30:00',3000),(3,'Trivendrum','New
Delhi',800,'08:00:00','11:30:00',6000),
```

```
(4,'Bengaluru','Frankfurt',10000,'06:00:00','23:30:00',50000),(5,'Kolkata','New
Delhi',2400,'11:00:00','03:30:00',9000),(6,'Bengaluru','Frankfurt',8000,'09:00:00','23:00:00',40000);
```

```
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);
```

## Query1

**Find names of aircrafts where pilots authorised to operate them have salary >80000**

```
select aname from aircraft where aid in(select aid from certified where eid in(select eid from
employees where salary>80000));
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
aname			
Airbus			
Jet airways			
Airbus			

## Query 2

**For all pilots certified for >3 aircrafts find eid and maximum cruising range**

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

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
eid	max(a.cru_range)		
101	5000		
102	4500		
103	4500		
104	2200		

### Query 3

**Find names of pilots whose sal is less than price of cheapest route from Blore to Frankfurt ?**

```
select ename,salary from employees where salary< all(select price from flights where  
ffrom='Bengaluru'and tto='Frankfurt');
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
	ename	salary	
▶	Tilak	5000	

### Query 4

**For aircrafts with cruising range>1000kms find aircraft name and avg salary of all pilots certified to fly it ?**

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

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
	aid	aname	avg(e.salary)
▶	1	Airbus	71000.0000
	4	Indigo	50000.0000
	5	Boeing	60000.0000
	6	Airbus	67333.3333

### Query 5

**Find pilots name certified for some Boeing aircraft?**

```
select ename from employees where eid in(select eid from certified where aid in(select aid from  
aircraft where aname='Boeing'));
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
	ename		
▶	Avinash		
	Lokesh		
	Rakesh		

## Query 6

Find aids of all aircrafts that can be used for routes from Bangalore to New Delhi?

Result Grid		Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
	aid				
▶	1				
	2				
	3				
	4				
	5				
	6				
*	NULL				

```
select aid from aircraft where cru_range > (select distance from flights where ffrom='Bangaluru' and tto='New Delhi');
```