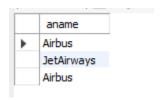# Week-8

Creating tables and inserting values

create database Airline;
use Airline;

create table flights(
flno int, ffrom varchar(50), tto varchar(50), distance int, departs time, arrives time, price int,
primary key(flno));

create table aircraft(
aid int, aname varchar(50), cruisingrange int,
primary key(aid));

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);

create table employee(
eid int, ename varchar(50), salary int,
primary key(eid));

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),(10
4,6),(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);

i. Find the names of aircraft such that all pilots certified to operate them have salaries more than Rs.80,000.
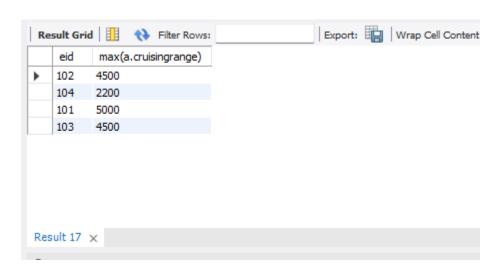
select a.aname from aircraft a
where a.aid in(select c.aid from certified c
                          where c.eid in(select e.eid from employee e
                                              where salary>80000));

aname
▶ Airbus
JetAirways
Airbus

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.cruisingrange)
from certified c,aircraft a
where c.aid=a.aid group by c.eid having count(*)>=3;

Result Grid | **Filter Rows:** | **Export:** | **Wrap Cell Content**

eid	max(a.cruisingrange)
▶ 102	4500
104	2200
101	5000
103	4500

Result 17 ×

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

Bengaluru to Frankfurt.

select e.ename from employee e
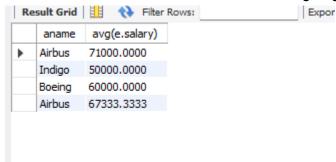where e.salary<(select min(f.price) from flights f
                              where f.ffrom='Banglore' and f.tto='Frankfurt');

	ename
▶	Tilak

iv. 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.

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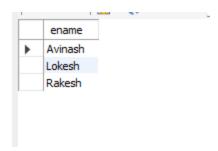from aircraft a,employee e,certified c
where a.aid=c.aid and e.eid=c.eid and a.cruisingrange>1000 group by c.aid;

Result Grid | Filter Rows: | Expor

	aname	avg(e.salary)
▶	Airbus	71000.0000
	Indigo	50000.0000
	Boeing	60000.0000
	Airbus	67333.3333

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

select e.ename
from employee e
where e.eid in (select c.eid from certified c
                              where c.aid in (select a.aid from aircraft a
                                              where a.aname='Boeing'));

	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.cruisingrange>(select distance from flights
                                          where ffrom='Banglore' and tto='New Delhi');

	aid
▶	1
	2
	3
	4
	5
	6
*	NULL