WEEK 8

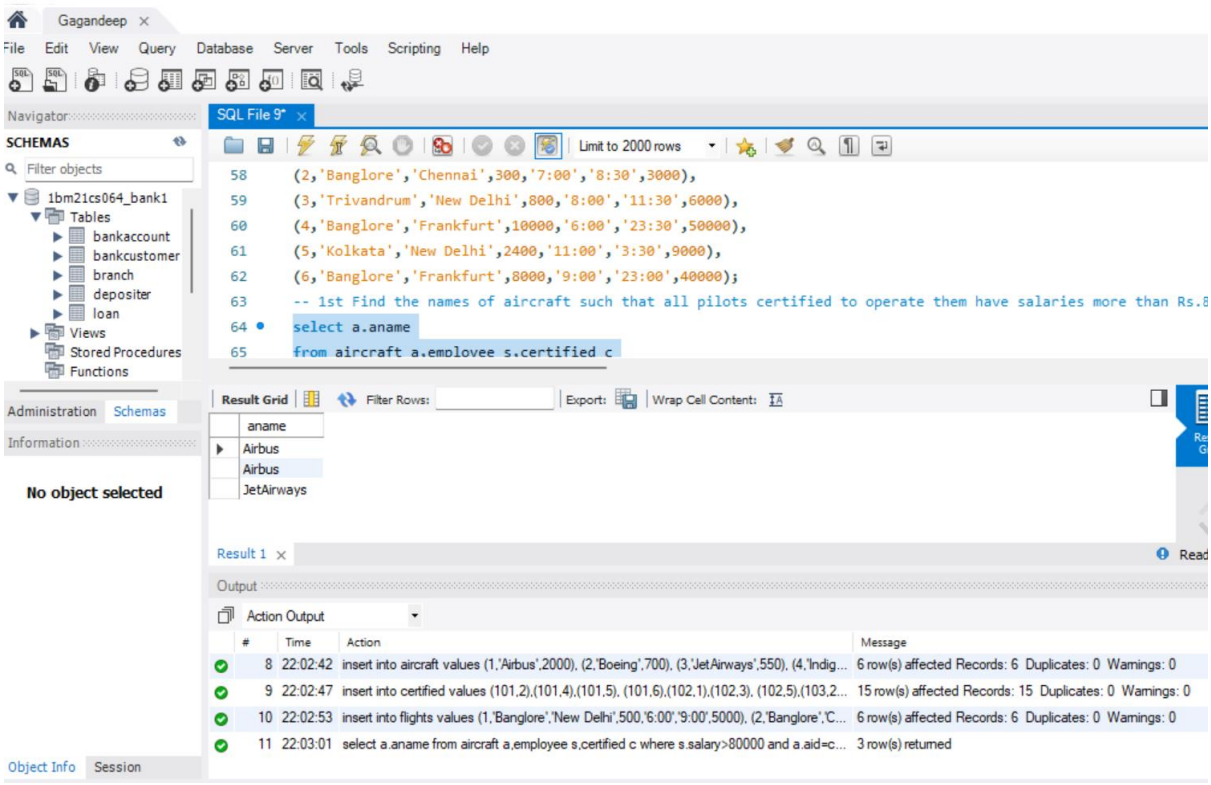
```
create database Airline;
use Airline;
create table flights(
flno int,
from1 varchar(50),
to1 varchar(50),
distance int,
departs time,
arrives time,
price int,
primary key(flno));

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

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

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);

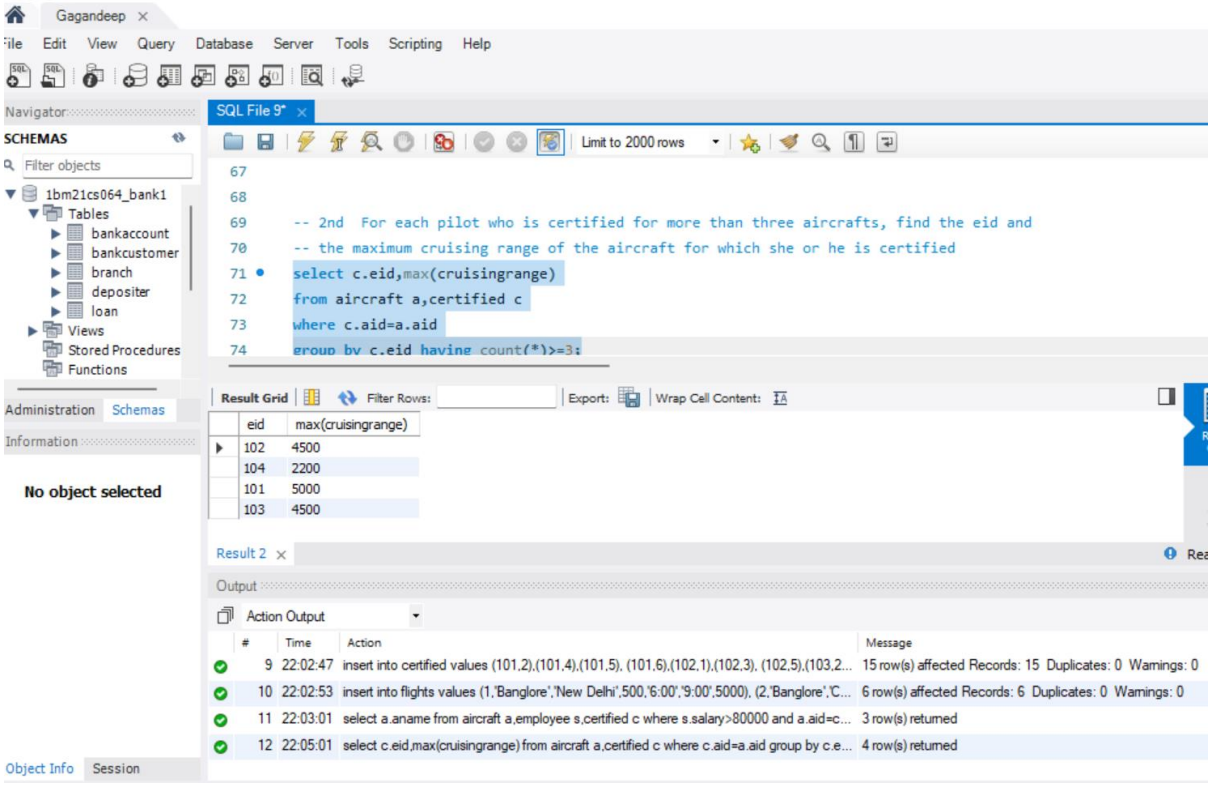
QUERIES:

-- 1st 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,employee s,certified c
where s.salary>80000 and a.aid=c.aid and c.eid=s.eid;

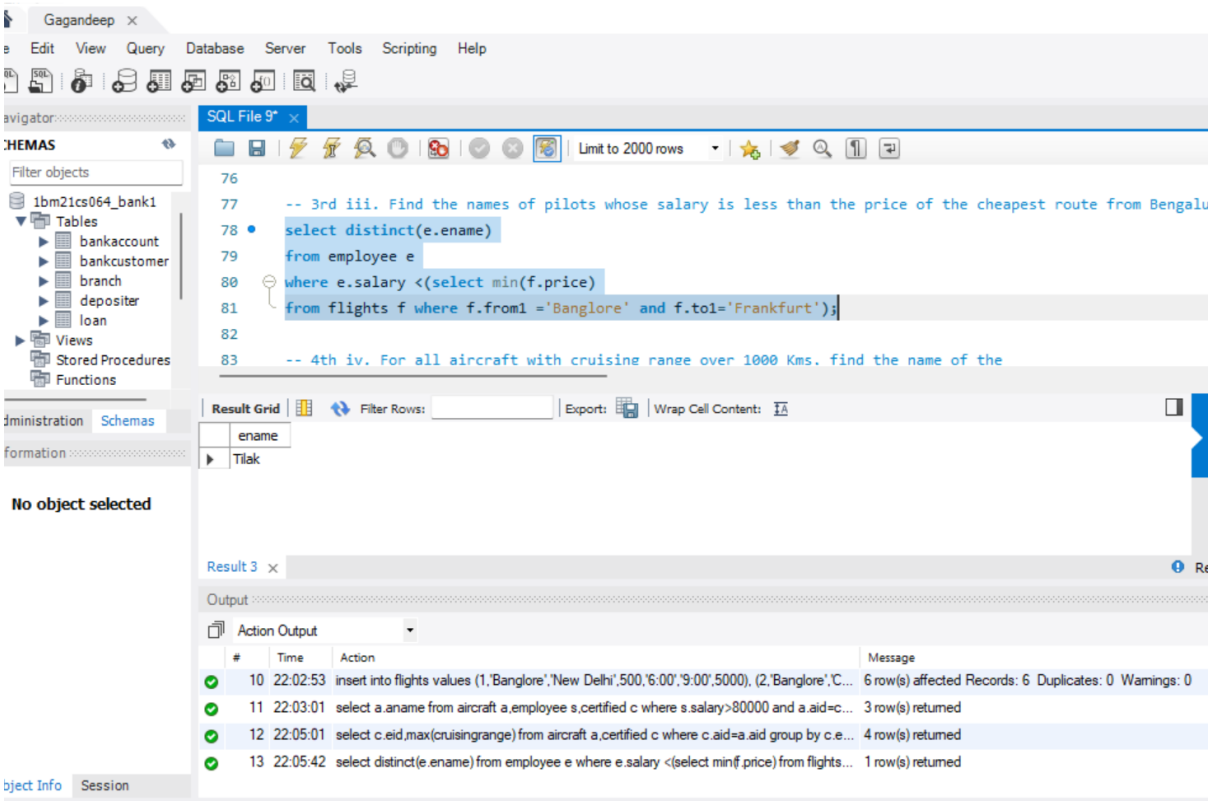


-- 2nd For each pilot who is certified for more than three aircrafts, find the eid and
-- the maximum cruising range of the aircraft for which she or he is certified
select c.eid,max(cruisingrange)
from aircraft a,certified c

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

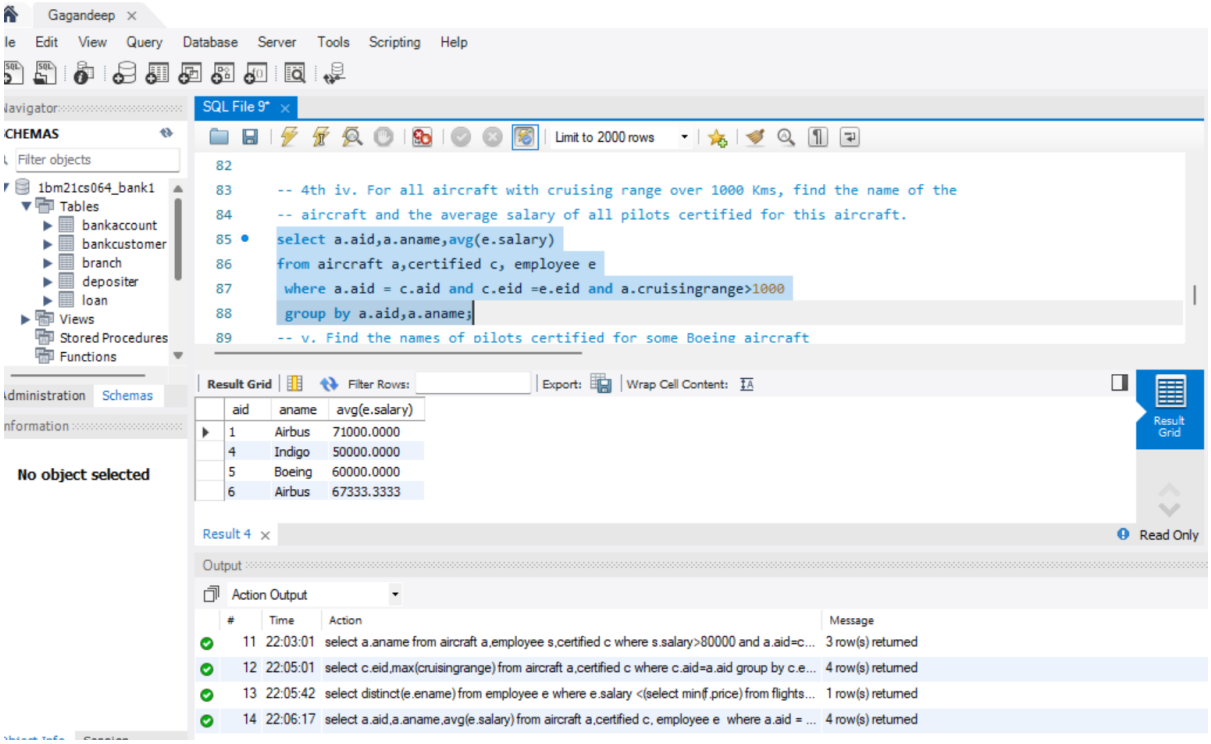


-- 3rd iii. Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru to Frankfurt.
select distinct(e.ename)
from employee e
where e.salary <(select min(f.price)
from flights f where f.from1 ='Banglore' and f.to1='Frankfurt');

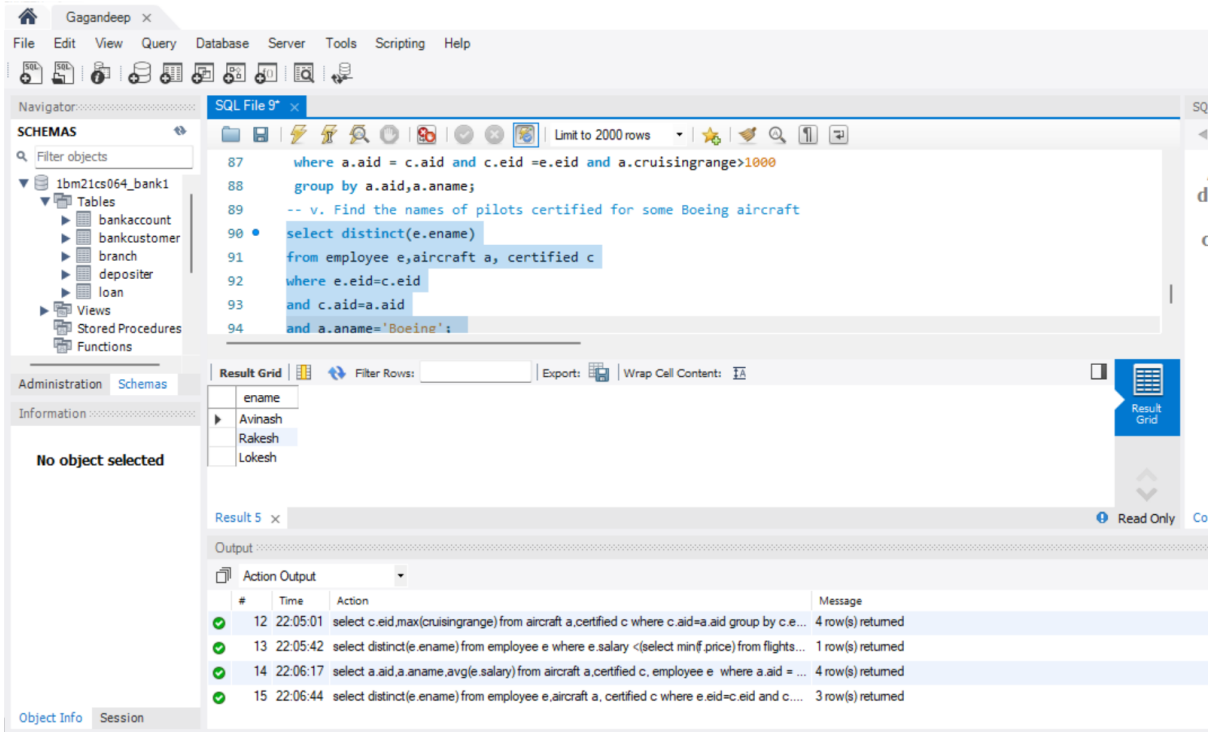


-- 4th iv. For all aircraft with cruising range over 1000 Kms, find the name of the
-- aircraft and the average salary of all pilots certified for this aircraft.

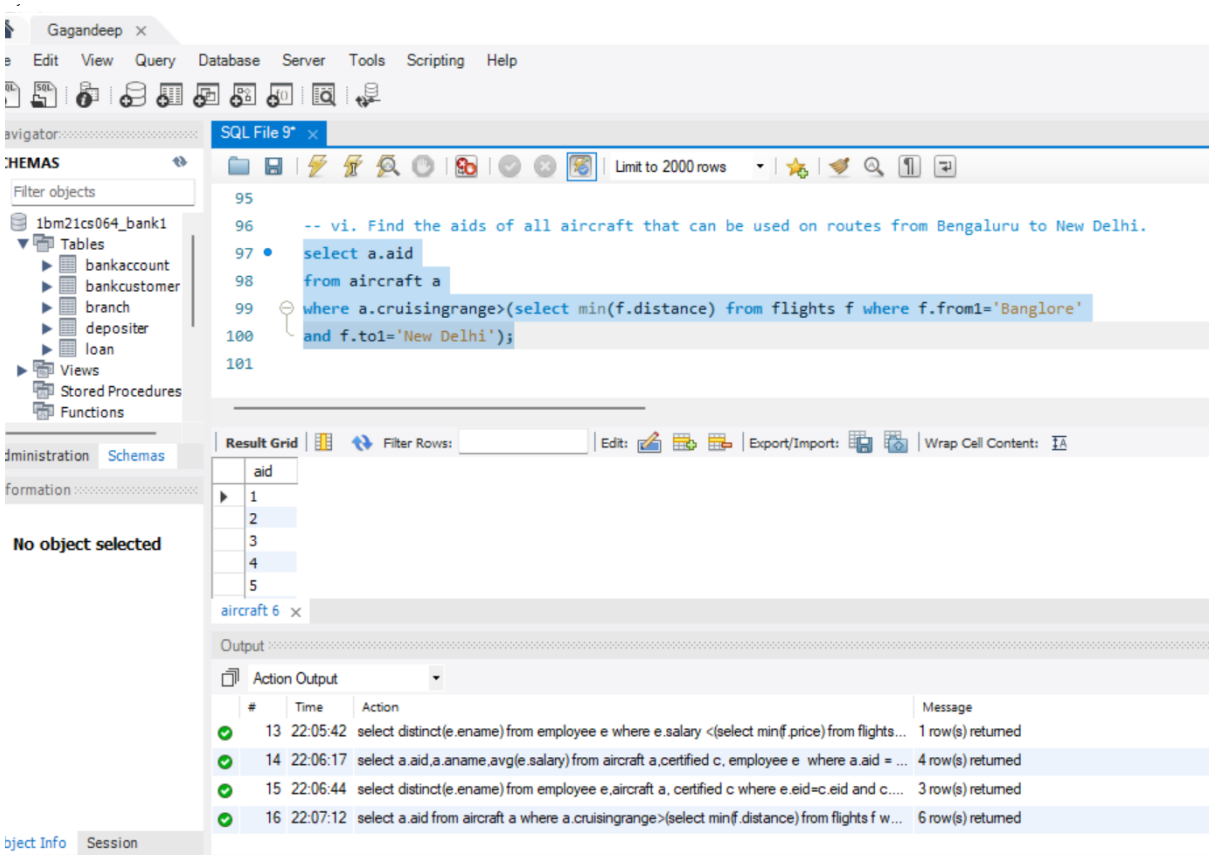
```
select a.aid,a.aname,avg(e.salary)
from aircraft a,certified c, employee e
 where a.aid = c.aid and c.eid =e.eid and a.cruisingrange>1000
 group by a.aid,a.aname;
```



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



-- 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 min(f.distance) from flights f where f.from1='Banglore'
and f.to1='New Delhi');


Gagandeep
Edit View Query Database Server Tools Scripting Help
SCHEMAS
Filter objects
1bm21cs064_bank1
Tables
bankaccount
bankcustomer
branch
depositer
loan
Views
Stored Procedures
Functions
Administration Schemas
Information
No object selected
Object Info Session
SQL File 9*
Limit to 2000 rows
95
96 -- vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.
97 select a.aid
98 from aircraft a
99 where a.cruisingrange>(select min(f.distance) from flights f where f.from1='Banglore'
100 and f.to1='New Delhi');
101
Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:
aid
1
2
3
4
5
aircraft 6
Output
Action Output
Time Action Message
13 22:05:42 select distinct(e.ename) from employee e where e.salary <(select min(f.price) from flights... 1 row(s) returned
14 22:06:17 select a.aid,a.aname,avg(e.salary) from aircraft a,certified c, employee e where a.aid = ... 4 row(s) returned
15 22:06:44 select distinct(e.ename) from employee e,aircraft a, certified c where e.eid=c.eid and c.... 3 row(s) returned
16 22:07:12 select a.aid from aircraft a where a.cruisingrange>(select min(f.distance) from flights f w... 6 row(s) returned