

```
create table flights(  
  flno int,  
  ffrom varchar(20),  
  tto varchar(20),  
  distance int,  
  depart timestamp,  
  arrives timestamp,  
  price int,  
  primary key(flno));
```

```
create table aircrafts(  
  aid int,  
  aname varchar(20),  
  cruisingrange int,  
  primary key(aid));
```

```
create table employess(  
  eid int,  
  ename varchar(20),  
  salary int,  
  primary key(eid));
```

```
create table certified(  
  eid int,  
  aid int,
```

foreign key(eid) references employess(eid),

foreign key(aid) references aircrafts(aid));

insert into aircrafts values(101,'747',3000);

insert into aircrafts values(102,'boeing',900);

insert into aircrafts values(103,'647',800);

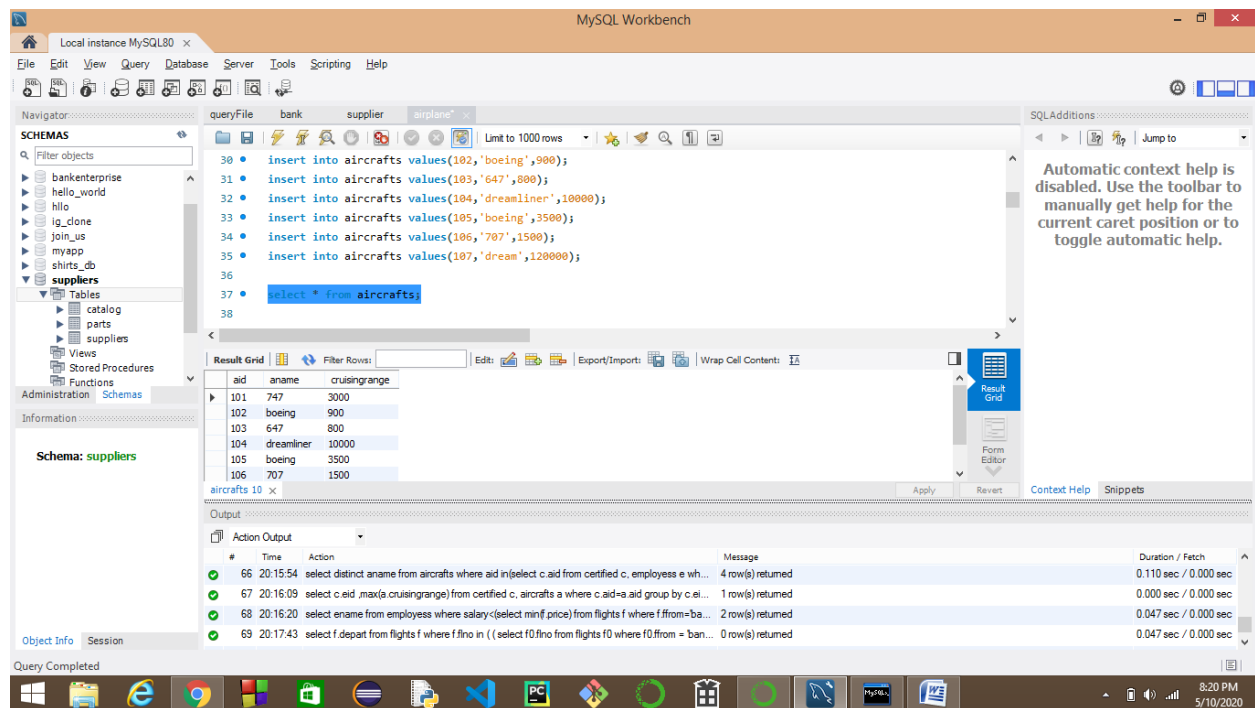
insert into aircrafts values(104,'dreamliner',10000);

insert into aircrafts values(105,'boeing',3500);

insert into aircrafts values(106,'707',1500);

insert into aircrafts values(107,'dream',120000);

select * from aircrafts;



insert into employess values(701,'A',50000);

insert into employess values(702,'B',100000);

insert into employess values(703,'C',150000);

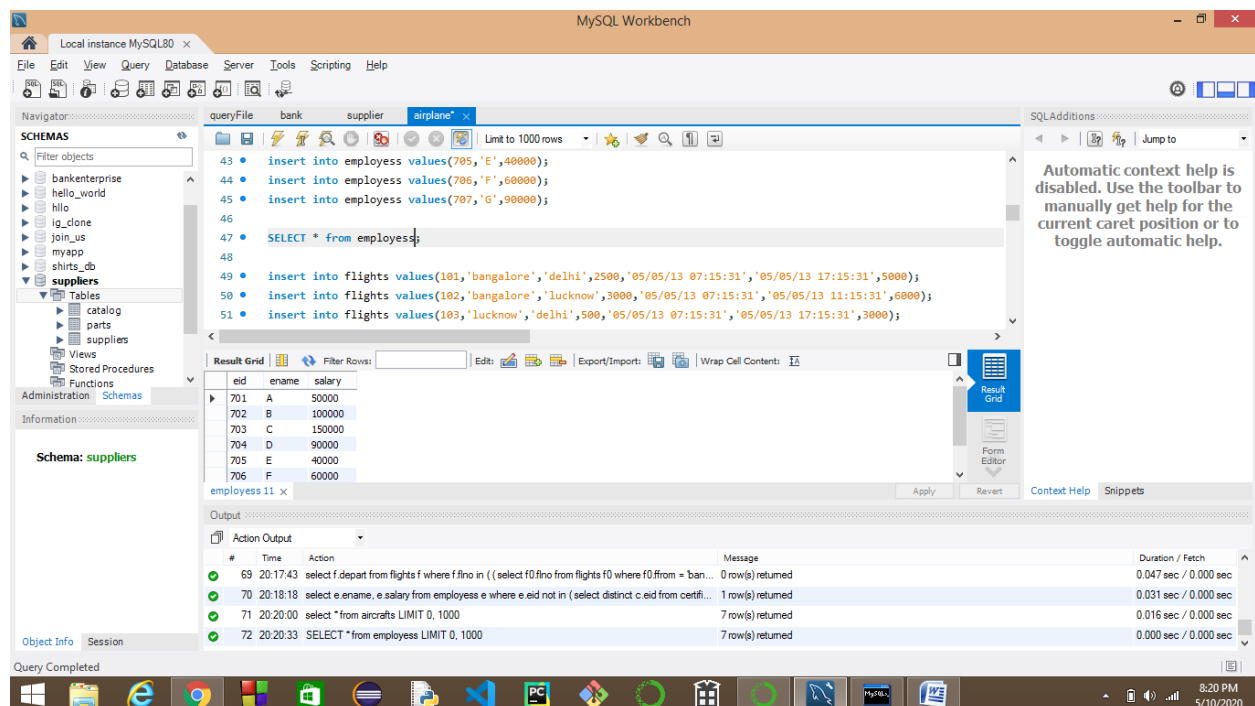
insert into employess values(704,'D',90000);

insert into employess values(705,'E',40000);

insert into employess values(706,'F',60000);

insert into employess values(707,'G',90000);

SELECT * from employess;



insert into flights values(101,'bangalore','delhi',2500,'05/05/13 07:15:31','05/05/13 17:15:31',5000);

insert into flights values(102,'bangalore','lucknow',3000,'05/05/13 07:15:31','05/05/13 11:15:31',6000);

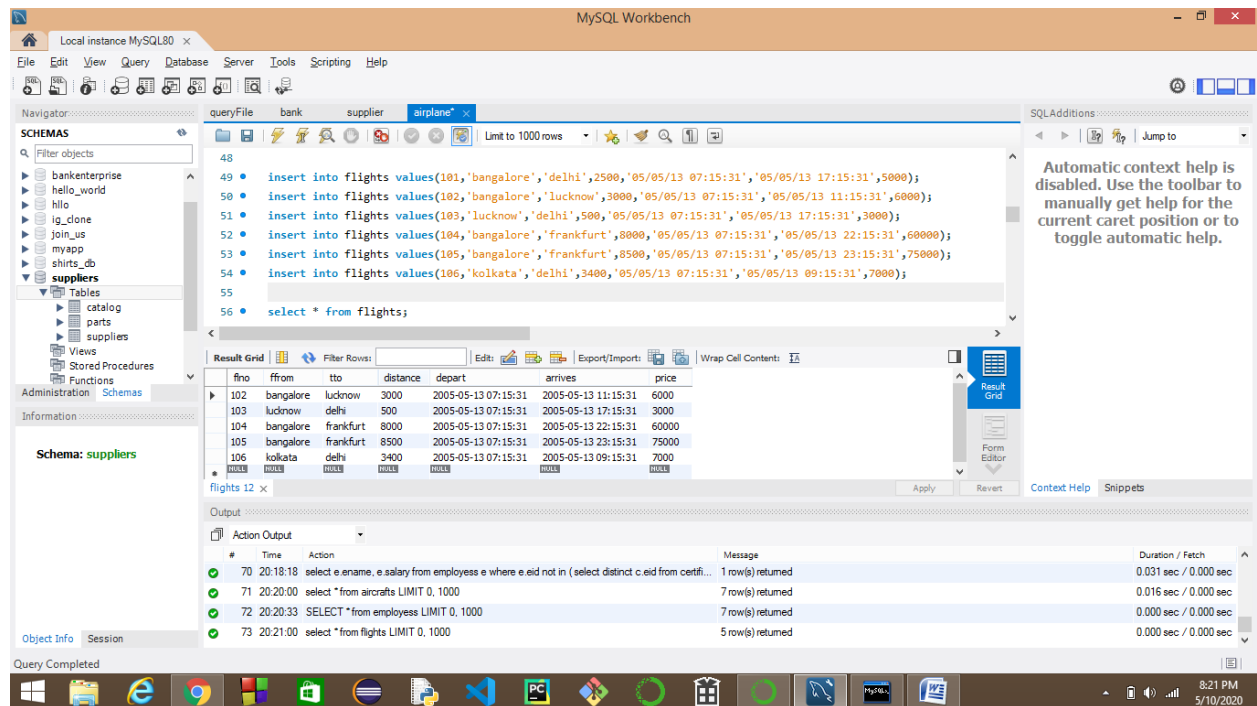
insert into flights values(103,'lucknow','delhi',500,'05/05/13 07:15:31','05/05/13 17:15:31',3000);

insert into flights values(104,'bangalore','frankfurt',8000,'05/05/13 07:15:31','05/05/13 22:15:31',60000);

insert into flights values(105,'bangalore','frankfurt',8500,'05/05/13 07:15:31','05/05/13 23:15:31',75000);

insert into flights values(106,'kolkata','delhi',3400,'05/05/13 07:15:31','05/05/13 09:15:31',7000);

select * from flights;



insert into certified values(701,101);

insert into certified values(701,102);

insert into certified values(701,106);

insert into certified values(701,105);

insert into certified values(702,104);

insert into certified values(703,104);

insert into certified values(704,104);

insert into certified values(702,107);

insert into certified values(703,107);

insert into certified values(704,107);

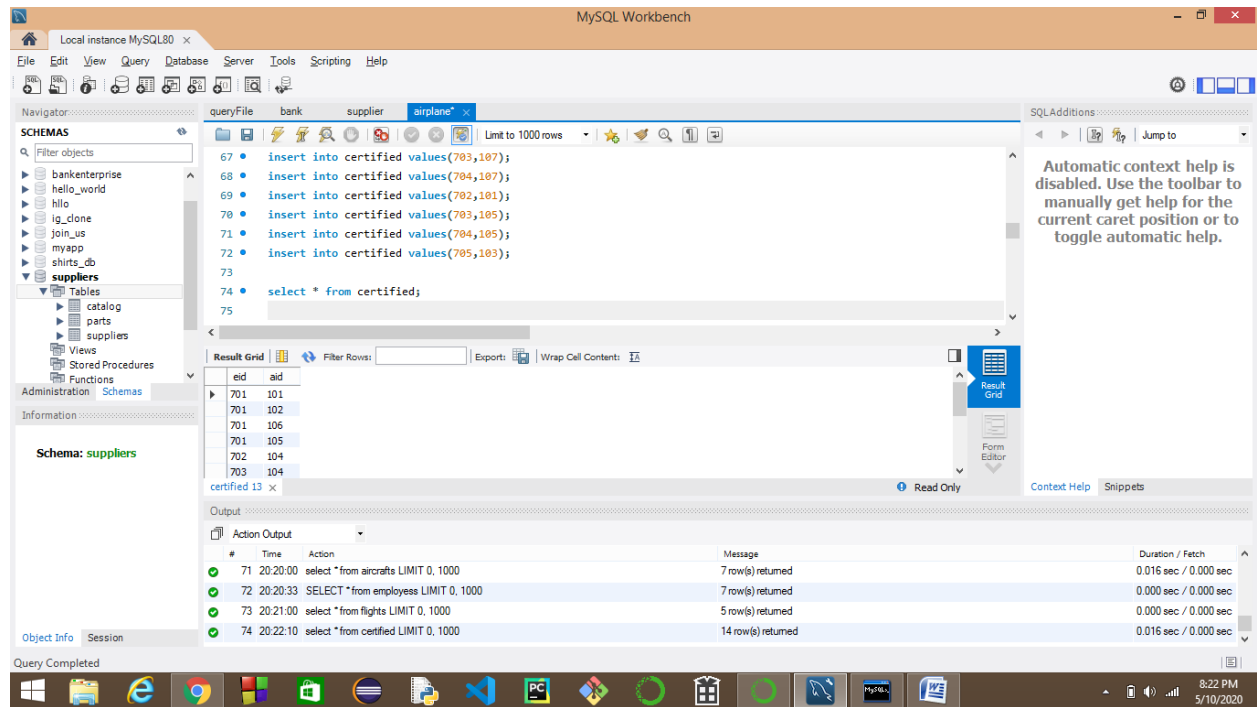
insert into certified values(702,101);

insert into certified values(703,105);

insert into certified values(704,105);

insert into certified values(705,103);

select * from certified;



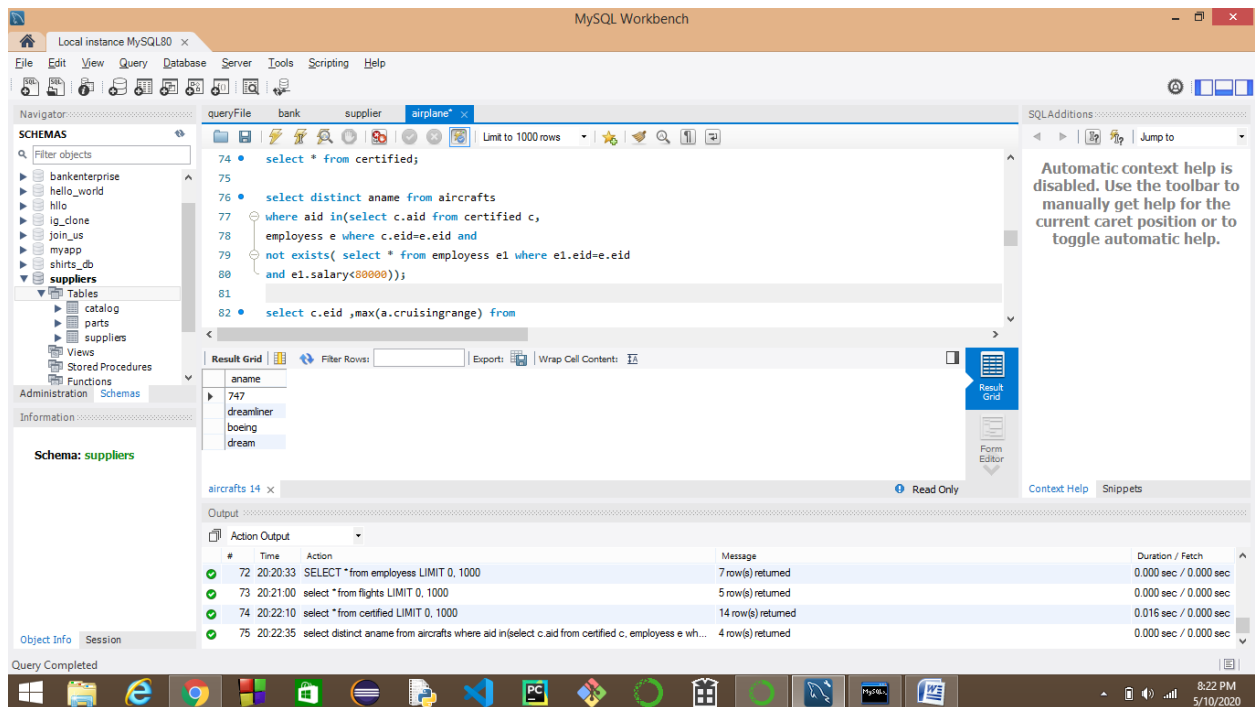
select distinct aname from aircrafts

where aid in(select c.aid from certified c,

employess e where c.eid=e.eid and

not exists(select * from employess e1 where e1.eid=e.eid

and e1.salary<80000));

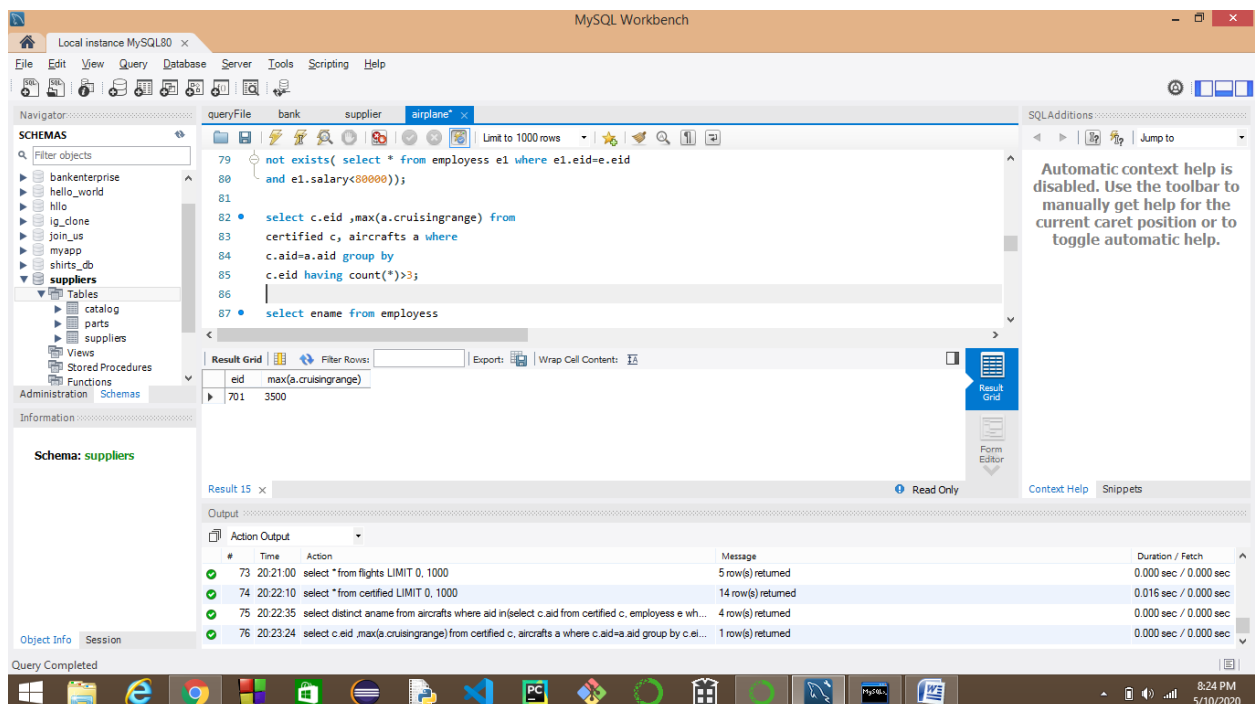


select c.eid ,max(a.cruisingrange) from

certified c, aircrafts a where

c.aid=a.aid group by

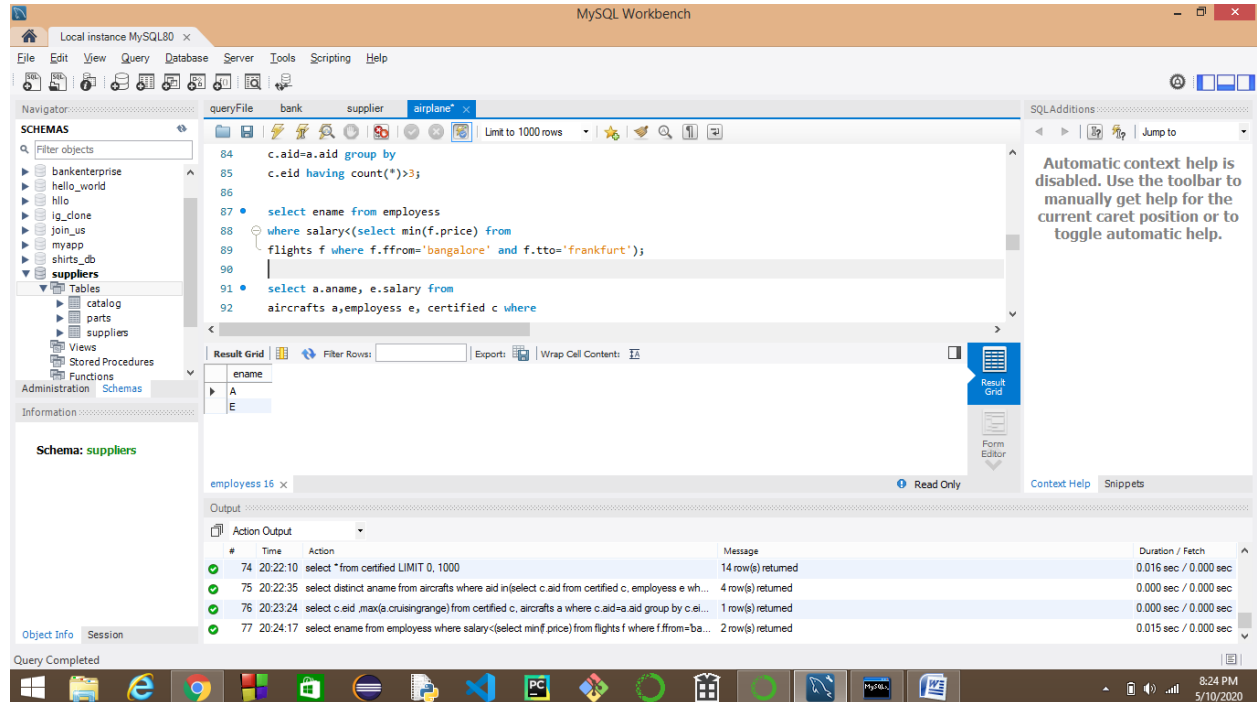
c.eid having count(*)>3;



select ename from employess

where salary<(select min(f.price) from

flights f where f.ffrom='bangalore' and f.tto='frankfurt');

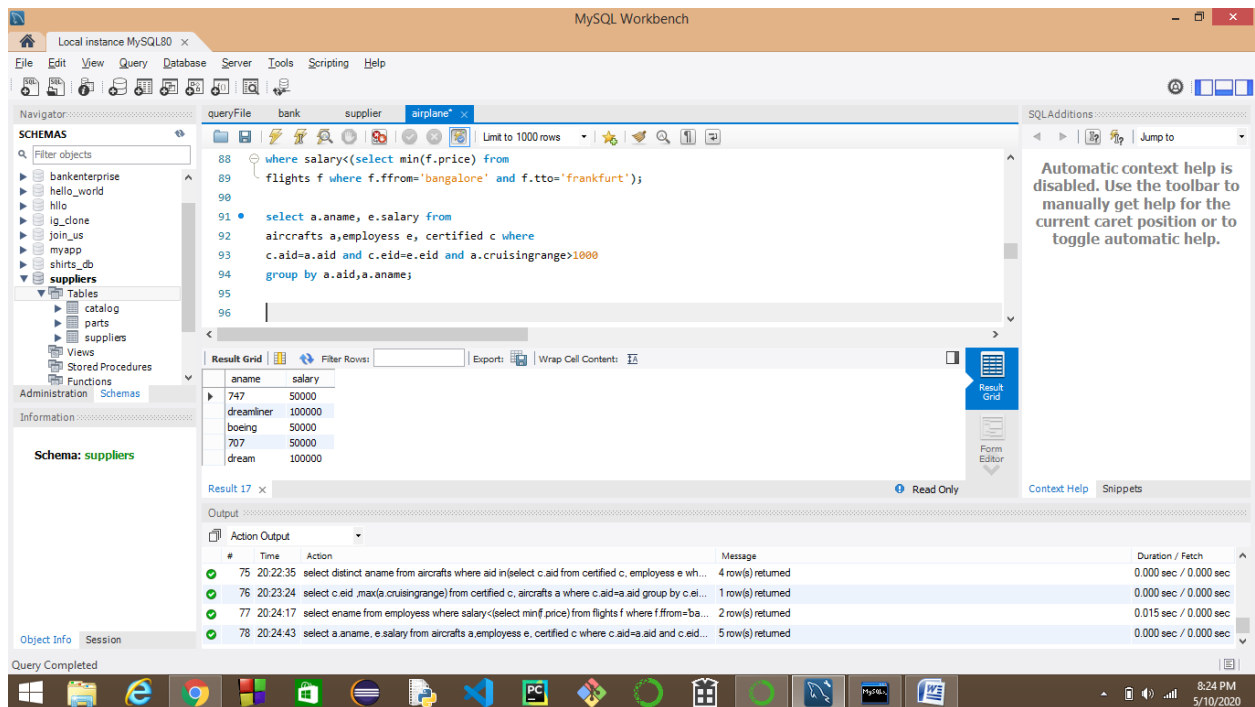


select a.aname, e.salary from

aircrafts a,employess e, certified c where

c.aid=a.aid and c.eid=e.eid and a.cruisingrange>1000

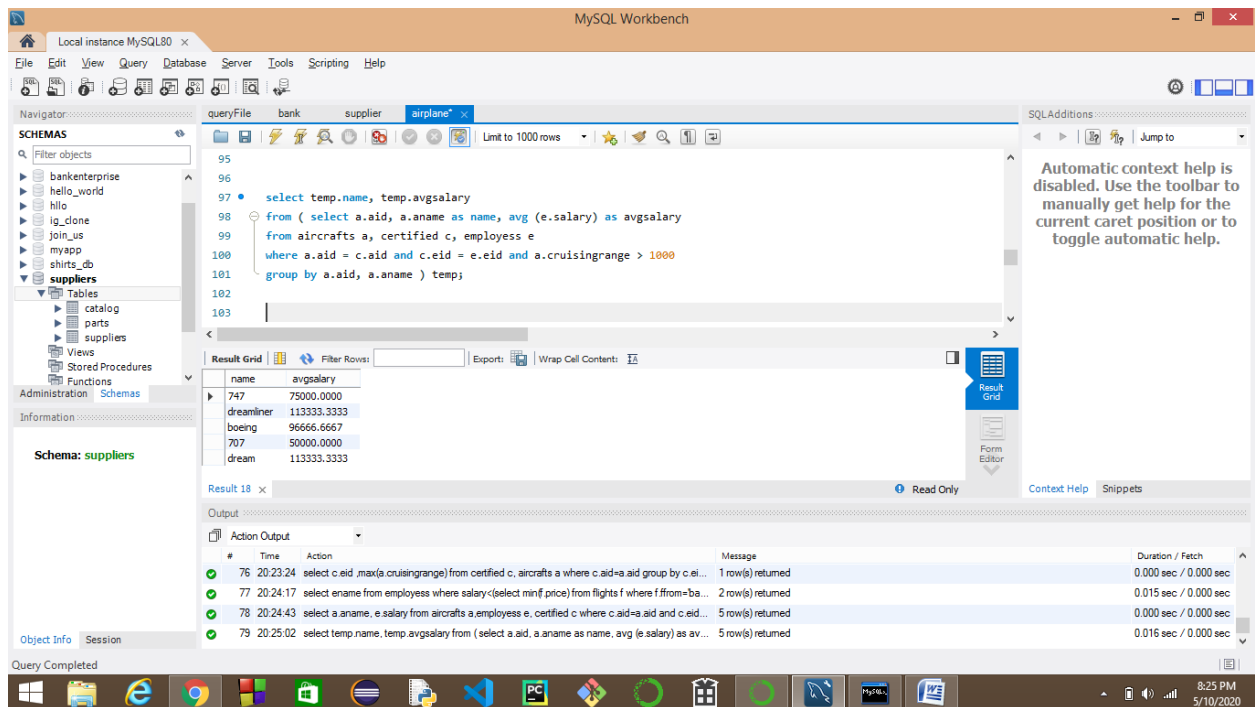
group by a.aid,a.aname;



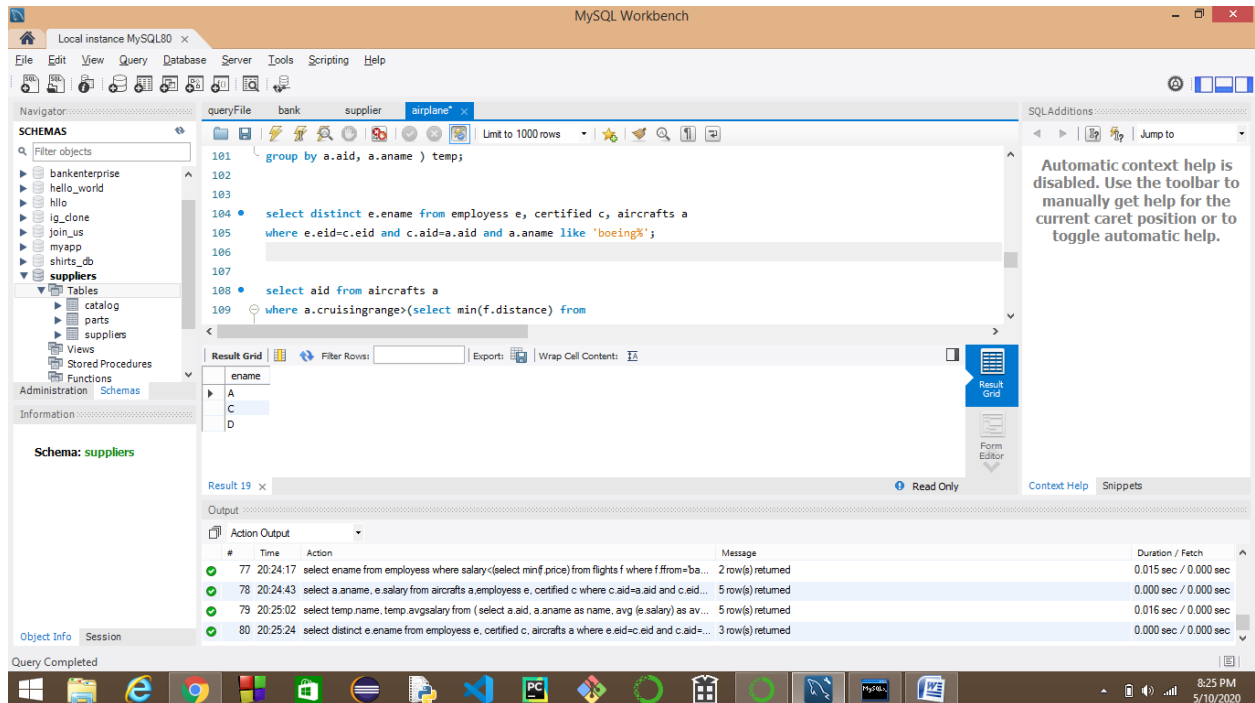
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select temp.name, temp.avgsalary
from ( select a.aid, a.aname as name, avg (e.salary) as avgsalary
from aircrafts a, certified c, employess e
where a.aid = c.aid and c.eid = e.eid and a.cruisingrange > 1000
group by a.aid, a.aname ) temp;

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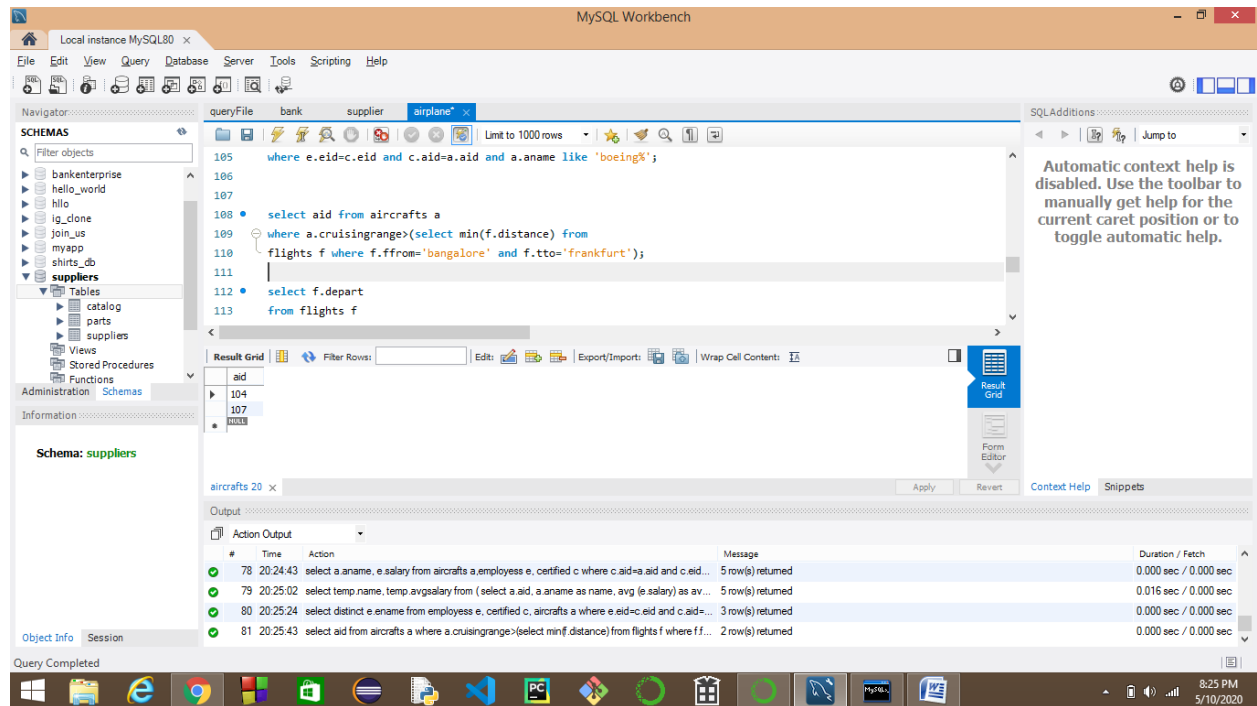



select distinct e.ename from employess e, certified c, aircrafts a
where e.eid=c.eid and c.aid=a.aid and a.aname like 'boeing%';



select aid from aircrafts a
where a.cruisingrange>(select min(f.distance) from

flights f where f.ffrom='bangalore' and f.tto='frankfurt');



select f.depart

from flights f

where f.flnoin ((select f0.flnoin

from flights f0

where f0.ffrom = 'bangalore' and f0.tto = 'delhi'

and extract(hour from f0.arrives) < 18)

union

(select f0.flnoin

from flights f0, flights f1

where f0.ffrom = 'bangalore' and f0.tto <> 'delhi'

and f0.tto = f1.ffrom and f1.tto = 'delhi'

and f1.depart > f0.arrives and extract(hour from f1.arrives) < 18)

union

(select f0.flnoin

```

from flights f0, flights f1, flights f2

where f0.ffrom = 'bangalore'

and f0.tto = f1.ffrom

and f1.tto = f2.ffrom

and f2.tto = 'delhi'

and f0.tto <> 'delhi'

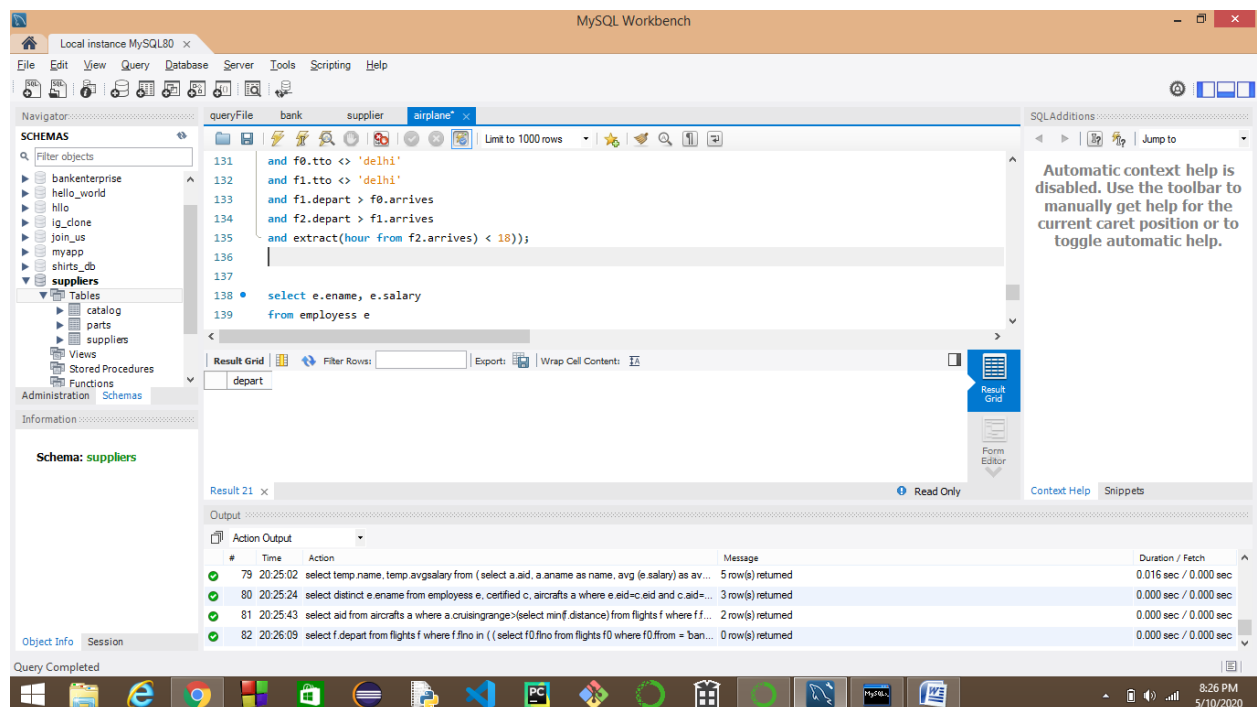
and f1.tto <> 'delhi'

and f1.depart > f0.arrives

and f2.depart > f1.arrives

and extract(hour from f2.arrives) < 18));

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```

select e.ename, e.salary

from employess e

where e.eid not in ( select distinct c.eid

from certified c )

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and e.salary > (select avg (e1.salary)

from employess e1

where e1.eid in

(select distinct c1.eid

from certified c1));

