```sql
create database if not exists supplier_1bm21cs176;
use supplier_1bm21cs176;

create table supplier_1bm21cs176(
        sid int,
        sname varchar(20),
        city varchar(20),
        primary key (sid)
);
select * from supplier_1bm21cs176;
insert into supplier_1bm21cs176 values
(10001,'Acme Widget','Bangalore'),
(10002,'Johns','Kolkata'),
(10003,'Vimal','Mumbai'),
(10004,'Reliance','Delhi');

create table parts_1bm21cs176(
        pid int,
        pname varchar(20),
        color varchar(20),
        primary key (pid)
);
select * from parts_1bm21cs176;
insert into parts_1bm21cs176 values
(20001,'Book','Red'),
(20002,'Pen','Red'),
(20003,'Pencil','Green'),
(20004,'Mobile','Green'),
(20005,'Charger','Black');

create table catalog_1bm21cs176(
        sid int,
        pid int,
        cost int,
        primary key (sid,pid),
        foreign key (sid) references supplier_1bm21cs176(sid),
        foreign key (pid) references parts_1bm21cs176(pid)
);
select * from catalog_1bm21cs176;
insert into catalog_1bm21cs176 values
(10001,20001,10),
(10001,20002,10),
(10001,20003,30),
(10001,20004,10),
```
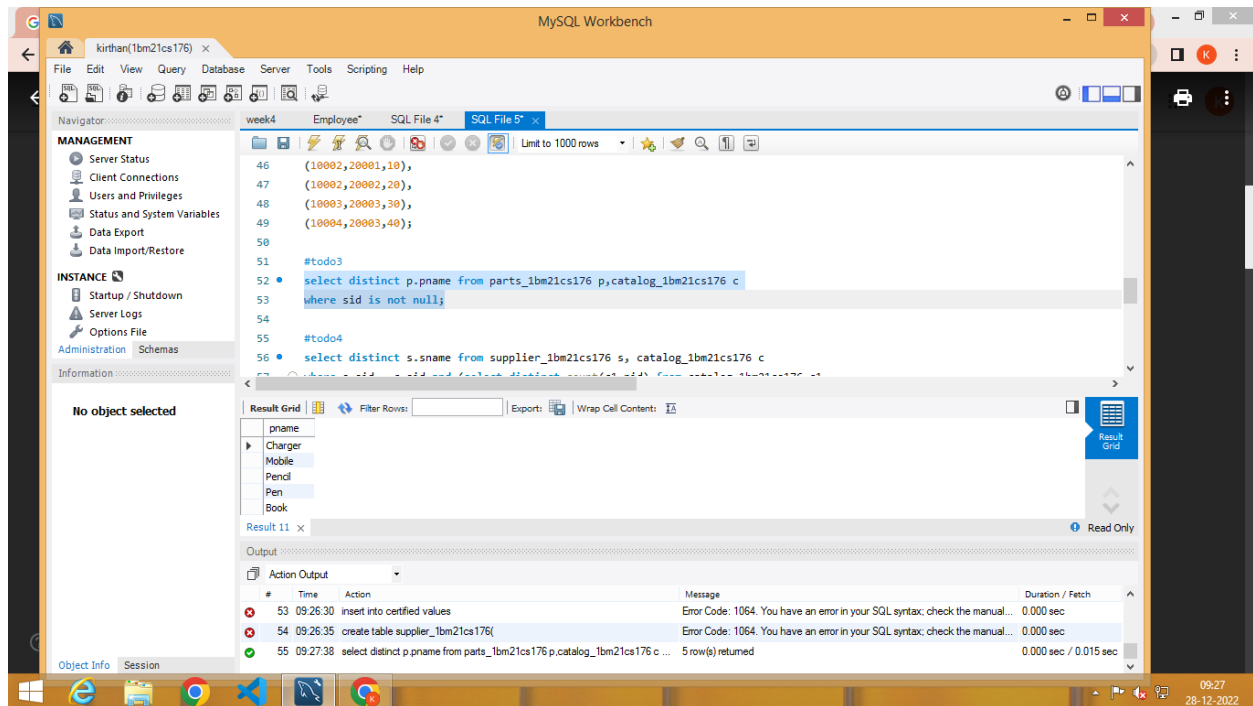
(10001,20005,10),
(10002,20001,10),
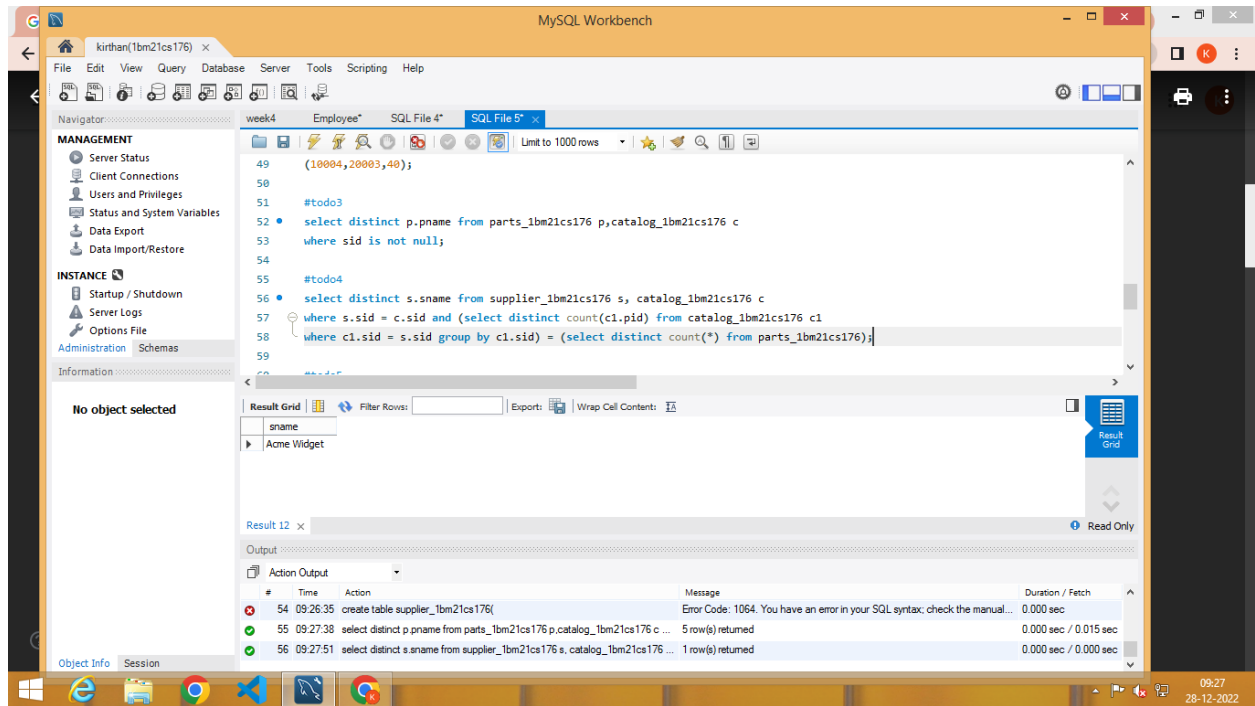(10002,20002,20),
(10003,20003,30),
(10004,20003,40);

#todo3
select distinct p.pname from parts_1bm21cs176 p,catalog_1bm21cs176 c
where sid is not null;

#todo4
select distinct s.sname from supplier_1bm21cs176 s, catalog_1bm21cs176 c
where s.sid = c.sid and (select distinct count(c1.pid) from catalog_1bm21cs176 c1
where c1.sid = s.sid group by c1.sid) = (select distinct count(*) from parts_1bm21cs176);

kirthan(1bm21cs176) ×

File   Edit   View   Query   Database   Server   Tools   Scripting   Help

week4   Employee*   SQL File 4*   SQL File 5* ×

Limit to 1000 rows

```
49      (10004,20003,40);
50
51      #todo3
52 •    select distinct p.pname from parts_1bm21cs176 p,catalog_1bm21cs176 c
53      where sid is not null;
54
55      #todo4
56 •    select distinct s.sname from supplier_1bm21cs176 s, catalog_1bm21cs176 c
57      where s.sid = c.sid and (select distinct count(c1.pid) from catalog_1bm21cs176 c1
58      where c1.sid = s.sid group by c1.sid) = (select distinct count(*) from parts_1bm21cs176);
59
```

Result Grid   Filter Rows: Export: Wrap Cell Content: IA

sname
Acme Widget

Result 12 ×   Read Only

Output

Action Output

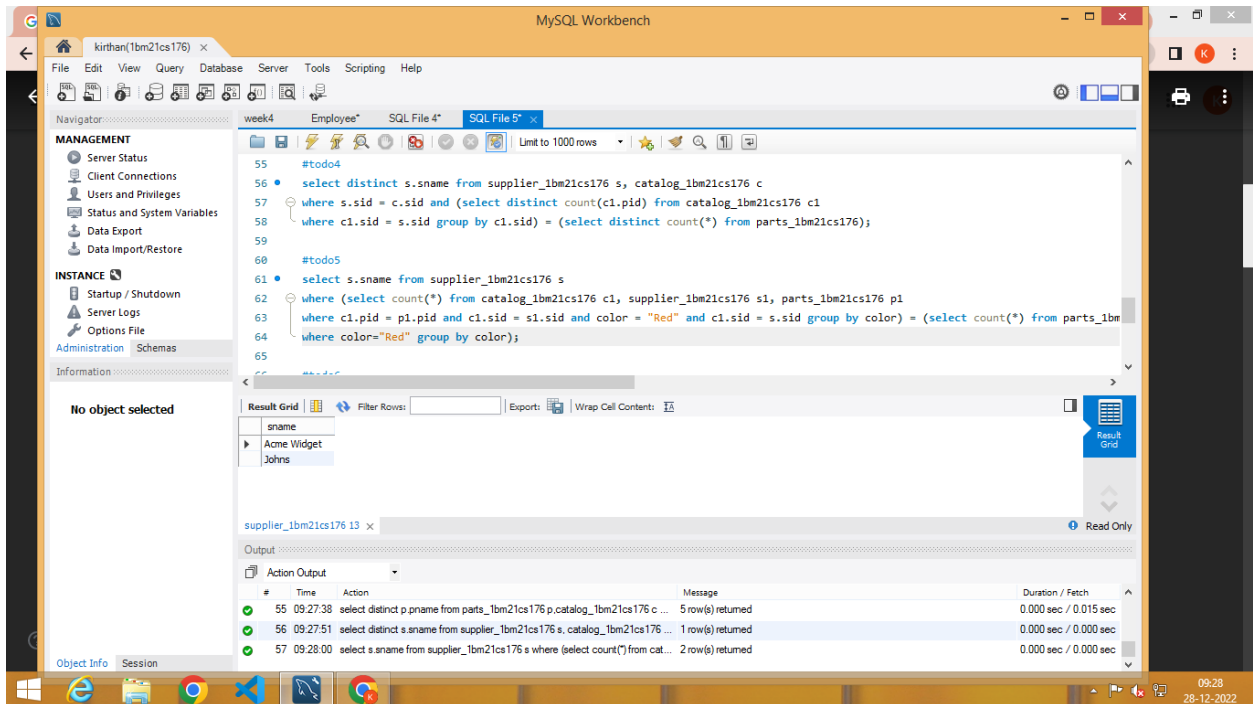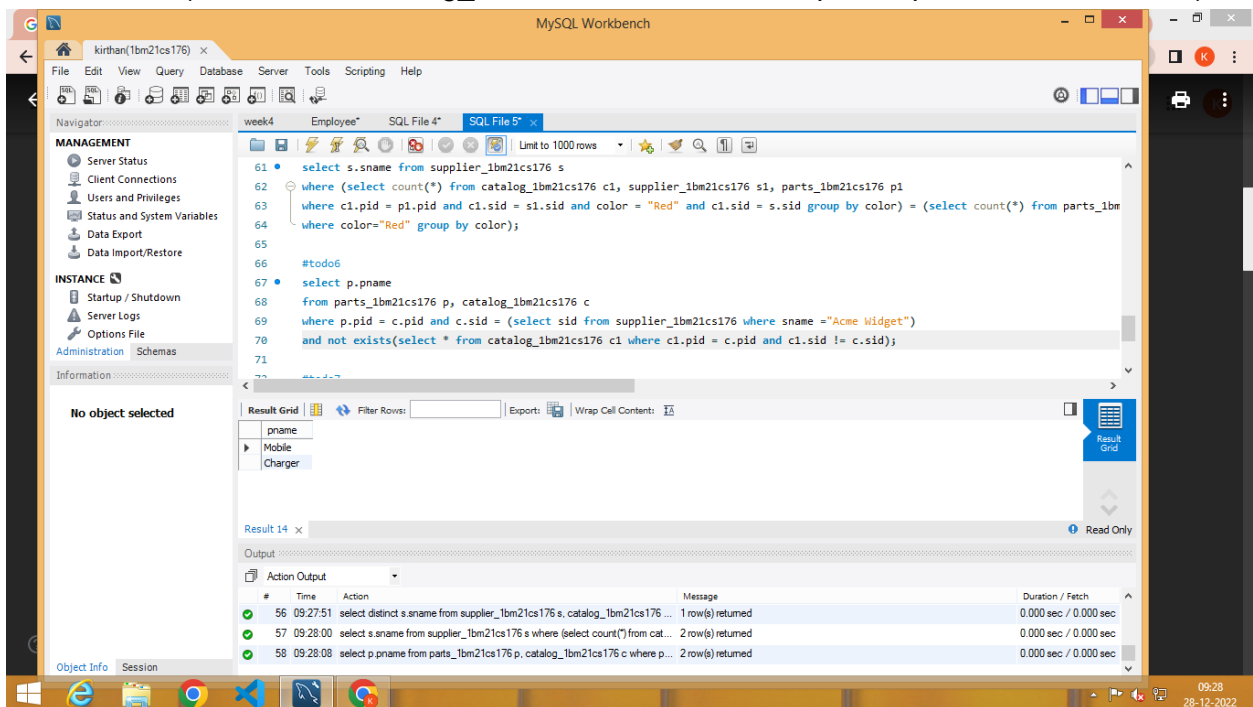| #	Time	Action	Message	Duration / Fetch
❌ 54	09:26:35	create table supplier_1bm21cs176(	Error Code: 1064. You have an error in your SQL syntax; check the manual...	0.000 sec
✅ 55	09:27:38	select distinct p.pname from parts_1bm21cs176 p,catalog_1bm21cs176 c ...	5 row(s) returned	0.000 sec / 0.015 sec
✅ 56	09:27:51	select distinct s.sname from supplier_1bm21cs176 s, catalog_1bm21cs176 ...	1 row(s) returned	0.000 sec / 0.000 sec

#todo5

select s.sname from supplier_1bm21cs176 s

where (select count(*) from catalog_1bm21cs176 c1, supplier_1bm21cs176 s1, parts_1bm21cs176 p1

where c1.pid = p1.pid and c1.sid = s1.sid and color = "Red" and c1.sid = s.sid group by color) =

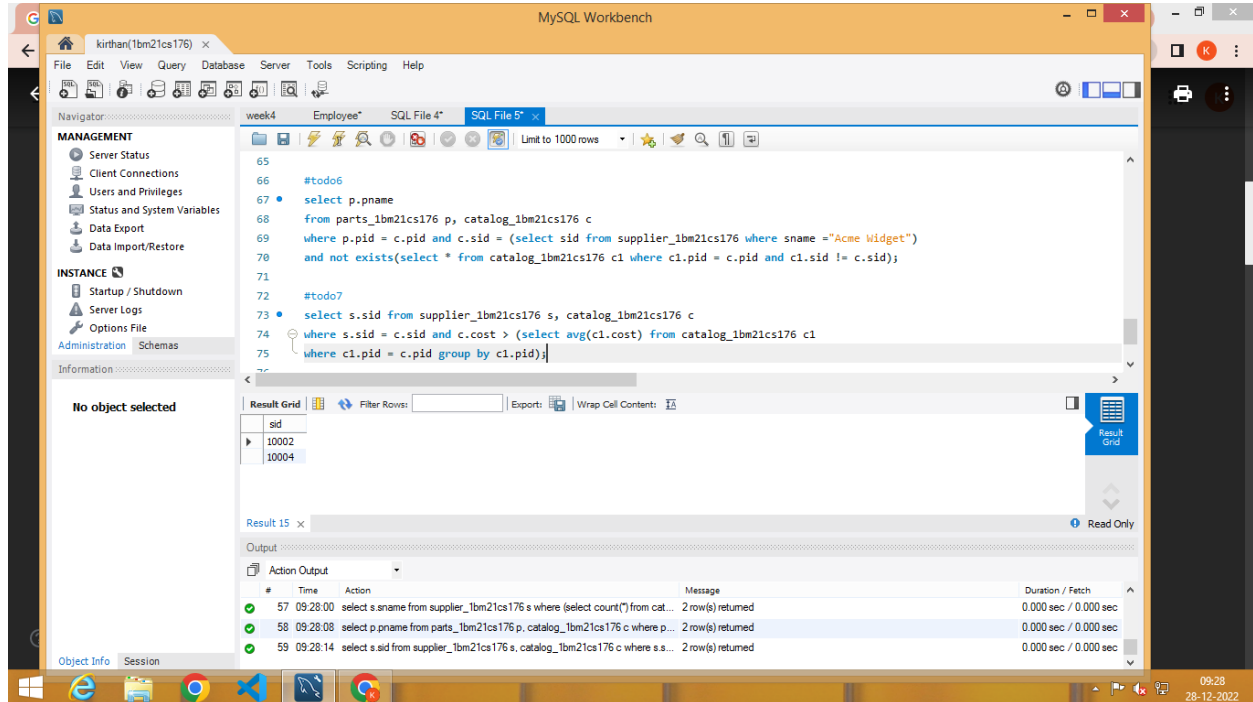(select count(*) from parts_1bm21cs176

where color="Red" group by color);

#todo6
select p.pname
from parts_1bm21cs176 p, catalog_1bm21cs176 c
where p.pid = c.pid and c.sid = (select sid from supplier_1bm21cs176 where sname ="Acme Widget")
and not exists(select * from catalog_1bm21cs176 c1 where c1.pid = c.pid and c1.sid != c.sid);

#todo7

select s.sid from supplier_1bm21cs176 s, catalog_1bm21cs176 c

where s.sid = c.sid and c.cost > (select avg(c1.cost) from catalog_1bm21cs176 c1

where c1.pid = c.pid group by c1.pid);

#todo8

select s.sname, c.pid from supplier_1bm21cs176 s, catalog_1bm21cs176 c

where s.sid = c.sid and c.cost = (select max(c1.cost) from catalog_1bm21cs176 c1

where c1.pid = c.pid group by c1.pid);

File   Edit   View   Query   Database   Server   Tools   Scripting   Help

week4   Employee*   SQL File 4*   SQL File 5*

Limit to 1000 rows

```
70      and not exists(select * from catalog_1bm21cs176 c1 where c1.pid = c.pid and c1.sid != c.sid);
71
72      #todo7
73    ● select s.sid from supplier_1bm21cs176 s, catalog_1bm21cs176 c
74      where s.sid = c.sid and c.cost > (select avg(c1.cost) from catalog_1bm21cs176 c1
75      where c1.pid = c.pid group by c1.pid);
76
77      #todo8
78    ● select s.sname, c.pid from supplier_1bm21cs176 s, catalog_1bm21cs176 c
79      where s.sid = c.sid and c.cost = (select max(c1.cost) from catalog_1bm21cs176 c1
80      where c1.pid = c.pid group by c1.pid);
```

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

sname	pid
Acme Widget	20001
Acme Widget	20004
Acme Widget	20005
Johns	20001
Johns	20002

Result 16

Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
● 58	09:28:08	select p.pname from parts_1bm21cs176 p, catalog_1bm21cs176 c where p...	2 row(s) returned	0.000 sec / 0.000 sec
● 59	09:28:14	select s.sid from supplier_1bm21cs176 s, catalog_1bm21cs176 c where s.s...	2 row(s) returned	0.000 sec / 0.000 sec
● 60	09:28:21	select s.sname, c.pid from supplier_1bm21cs176 s, catalog_1bm21cs176 c...	6 row(s) returned	0.000 sec / 0.000 sec

Object Info   Session

09:28
28-12-2022