```
SQL> start query1.sql
SQL> select cname, telephone#
  2  from customers
  3  where visits_made>=3 and telephone# like '666%';

CNAME          TELEPHONE#
-------------- ------------
Kathy          666-555-4567
Chris          666-555-6745

SQL> start query2.sql
SQL> select CNAME,TELEPHONE#
  2  from customers
  3  where CID in
  4  (select CID
  5  from purchases
  6  where TOTAL_PRICE >=100 and PTIME BETWEEN (sysdate-25) AND sysdate);

CNAME          TELEPHONE#
-------------- ------------
Kathy          666-555-4567
Chris          666-555-6745

SQL> start query3.sql
SQL> select pid, pname
  2    from products natural join ( purchases natural join employees ) where ename ='Peter' and
  3  □ (original_price*(1-discnt_rate))<10;

PID  PNAME
---- ---------------
p005 chair

SQL> start query4.sql
SQL> select *
  2  from purchases
  3  where (eid,pid,cid) in
  4  (select eid,pid,cid
  5  from employees,customers,products
  6  where SUBSTR(employees.telephone#,1,3)=SUBSTR(customers.TELEPHONE#,1,3)and products.pname<>'TV');

     PUR# EID PID  CID        QTY PTIME     TOTAL_PRICE
---------- --- ---- ---- ---------- --------- -----------
   100009 e03 p001 c007          1 12-MAR-20        8.99
   100002 e01 p003 c001          1 20-FEB-20       118.4
   100011 e02 p004 c006         10 16-MAR-20         9.9
   100004 e01 p005 c003          2 23-FEB-20       18.17

SQL> start query5.sql
SQL> select pur#, to_char(ptime, 'MONTH DD,YYYY DAY HH24:MI:SS') as time
  2  from purchases
  3  order by ptime;

     PUR#
----------
TIME
-------------------------------------------------------------------------------
   100001
JANUARY   12,2020 SUNDAY    10:34:30

   100008
```

JANUARY   16,2020 THURSDAY 12:22:15

   100010
JANUARY   19,2020 SUNDAY   17:32:37

     PUR#

TIME

   100013
JANUARY   30,2020 THURSDAY 10:38:25

   100007
FEBRUARY 10,2020 MONDAY   17:12:20

   100012
FEBRUARY 18,2020 TUESDAY   15:56:38

     PUR#

TIME

   100002
FEBRUARY 20,2020 THURSDAY 11:23:36

   100004
FEBRUARY 23,2020 SUNDAY   16:23:35

   100003
MARCH   08,2020 SUNDAY   09:30:50

     PUR#

TIME

   100009
MARCH   12,2020 THURSDAY 14:44:23

   100006
MARCH   12,2020 THURSDAY 15:22:10

   100011
MARCH   16,2020 MONDAY   16:54:40

     PUR#

TIME

   100014
MARCH   18,2020 WEDNESDAY 10:54:06

   100005
MARCH   20,2020 FRIDAY   13:38:55

14 rows selected.

```
SQL> start query6.sql
SQL> select unique eid
  2  from employees,customers
  3  where SUBSTR(employees.telephone#,1,3)=SUBSTR(customers.TELEPHONE#,1,3);

EID
---
e03
e02
e01
e04

SQL> start query7.sql
SQL> select cname from customers natural join purchases
  2  where last_visit_date like ptime and cid in
  3  ( select cid from purchases natural join products
  4  where pname<>'tablet');

CNAME
----------
Katie
Kathy
Connie
John
Chris
Mike
Joe

7 rows selected.

SQL> start query8.sql
SQL> select emp1.ename
  2  from employees emp1
  3  where NOT EXISTS
  4  ( select *
  5  from employees emp2, purchases pur, products pro
  6  where emp1.eid = emp2.eid and emp2.eid = pur.eid and pro.pid= pur.pid and pro.original_price>=200);

ENAME
----------
Mike

SQL> start query9.sql
SQL> select pur.cid
  2  from purchases pur
  3  join products pro
  4  on pur.pid=pro.pid
  5  where pro.original_price > 200
  6  having count(pur.pid)=
  7  (select count(pid)
  8  from products
  9  where original_price > 200)
 10  group by pur.cid;

CID
----
c001

SQL> start query10.sql
```

```
SQL> select EID,ENAME
  2  from employees
  3  where EID in
  4  (select pur.eid
  5  from purchases pur
  6  □ join customers cust on pur.cid=cust.cid
  7  □ where cust.VISITS_MADE>=3);

EID ENAME
--- ---------------
e01 Peter
e02 David
e03 Susan

SQL> start query11.sql
SQL> select * from products natural join purchases where cid='c001' and pid not in (( select pid from purchases whe
06'));

PID  PNAME                QOH QOH_THRESHOLD ORIGINAL_PRICE DISCNT_RATE
---- --------------- ---------- ------------- -------------- -----------
     PUR# EID CID        QTY PTIME     TOTAL_PRICE
---------- --- ---- ---------- --------- -----------
p003 camera               20            5          148          .2
   100002 e01 c001          1 20-FEB-20       118.4

p008 computer              5            3          499          .3
   100006 e03 c001          1 12-MAR-20       349.3


SQL> start query12.sql
SQL> select CID
  2  from purchases
  3  where PID in
  4  (select PID
  5  from purchases
  6  where CID='c006');

CID
----
c006
c001
c006
c002

SQL> start query13.sql
SQL> select cname from customers where cid in
  2  □ ( select cid  from products natural join purchases
  3  □ where ( original_price -(total_price/qty))>100);

CNAME
---------------
Kathy
Chris

SQL> start query14.sql
SQL> select c.cname
  2  from customers c join purchases p
  3  on c.cid=p.cid
  4  where p.total_price in (select max(total_price) from purchases);
```

```
CNAME
---------------
Chris

SQL>
SQL> start query15.sql
SQL> select * from products where pid in (select pid from purchases having (count(distinct cid)>1) group by pid);

PID  PNAME                QOH QOH_THRESHOLD ORIGINAL_PRICE DISCNT_RATE
---- --------------- ---------- ------------- -------------- -----------
p002 TV                     6             5            249         .15
p004 pencil               100            10            .99           0
p006 lamp                  10             6          19.95          .1
p008 computer               5             3            499          .3

SQL> start query16.sql
SQL> select pur#
  2  from purchases
  3  where total_price >= (select total_price
  4  from purchases
  5  where cid='c006'
  6  order by total_price fetch next 1 rows only);

      PUR#
----------
    100001
    100002
    100004
    100005
    100006
    100007
    100008
    100010
    100011
    100012
    100013

      PUR#
----------
    100014

12 rows selected.

SQL> start query17.sql
SQL> select cid, cname, count(distinct pid)
  2  from customers natural join purchases
  3  group by cid, cname
  4  order by cid;

CID  CNAME           COUNT(DISTINCTPID)
---- --------------- ------------------
c001 Kathy                           3
c002 John                            1
c003 Chris                           3
c004 Mike                            1
c005 Mike                            1
c006 Connie                          2
c007 Katie                           1
c008 Joe                             1
```

8 rows selected.

```
SQL> start query18.sql
SQL> select c.cid,c.cname,sum(p.total_price)
  2  from customers c join purchases p on c.cid=p.cid
  3  where c.cid in
  4  (select c.cid
  5  from customers
  6  where c.visits_made in
  7  (select max(visits_made)
  8  from customers))
  9  group by c.cid,c.cname;

CID  CNAME          SUM(P.TOTAL_PRICE)
---- --------------- ------------------
c003 Chris                    752.68
c001 Kathy                    679.35

SQL> start query19.sql
SQL> select pid, pname, sum(qty) as qty
  2  from products natural join purchases
  3  group by pid, pname
  4  order by pid;

PID  PNAME                QTY
---- --------------- ----------
p001 stapler                 1
p002 TV                      2
p003 camera                  1
p004 pencil                 15
p005 chair                   2
p006 lamp                    5
p007 tablet                  1
p008 computer                3
p009 powerbank               3

9 rows selected.

SQL> start query20.sql
SQL> select customers.cname, sum(purchases.total_price)
  2  from purchases full outer join customers on customers.cid = purchases.cid group by customers.cname
  3  order by sum(purchases.total_price) DESC fetch next 2 rows only;

CNAME          SUM(PURCHASES.TOTAL_PRICE)
-------------- --------------------------
Chris                           752.68
Kathy                           679.35

SQL> spool off
```