Project 1:
section number: 1
Name : Nabha Girish Kumthekar

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_____
Signature:
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SQL> start query1
SQL> select pid, name from products where (qoh-10) >= qoh_threshold
and discnt_rate > 0.1;

```
PID  NAME
---- ---------------
p003 camera
p007 tablet
```

SQL> start query2
SQL> select distinct name, telephone# from customers c, purchases p
where c.cid = p.cid and c.telephone# like '%666%' and
to_char(p.ptime,'Month') like '%October%' and
  2 to_char(ptime, 'YYYY') like '%2017%';

```
NAME            TELEPHONE#
--------------- ------------
Kathy           666-555-4567
Joe             666-555-5746
```

SQL> start query3
SQL> select distinct name, telephone# from customers c, purchases p
where c.cid = p.cid and c.visits_made >= 1 and p.total_price >=100 and
to_char(p.ptime,'Month') like
  2 '%October%' and to_char(ptime, 'YYYY') like '%2017%';

```
NAME            TELEPHONE#
--------------- ------------
Kathy           666-555-4567
Mike            999-555-5674
```

Joe   666-555-5746

```
SQL> start query4
SQL> select distinct p.pid, name from products p where
(p.original_price * (1- p.discnt_rate)) < 10 and pid in
  2  (select pid from purchases pr where pr.pid = p.pid and
to_char(pr.ptime,'YYYY') like '%2017%' and
  3  to_char(pr.ptime,'Month') like '%Aug%' or
to_char(pr.ptime,'Month') like '%Sep%');

PID  NAME
---- ---------------
p005 chair

SQL> start query5
SQL> select  pr.pur#, pr.eid, pr.pid, pr.cid, pr.qty, pr.ptime,
pr.total_price from purchases pr,customers cr
  2  where pr.cid = cr.cid and cr.name like '%K%' and eid in
  3  (select eid from employees er, products p where er.eid = pr.eid
and er.telephone# like '%888%' and original_price in
  4  (select original_price from products p where p.original_price <15
and p.pid = pr.pid));

      PUR# EID PID  CID        QTY PTIME     TOTAL_PRICE
---------- --- ---- ---- ---------- --------- -----------
    100009 e03 p001 c007          1 12-OCT-17        8.99

SQL> start query6
SQL> set linesize 250
SQL> column product heading 'product name'
SQL> select distinct pr.pur#, p.name as product,
to_char(pr.ptime,'Month dd,yyyy Day HH:MM:SS')
  2  as ptime, pr.total_price, p.original_price * pr.qty-
pr.total_price
  3  as savings  from purchases pr, products p where p.pid = pr.pid;

      PUR# product name     PTIME
TOTAL_PRICE      SAVINGS
---------- ---------------
--------------------------------------------------------------------
-------------------- ----------- ----------
    100008 lamp             August    16,2017 Wednesday 12:08:15
17.96        1.99
    100005 tablet           October   15,2017 Sunday    01:10:55
119.2        29.8
    100012 computer         September 18,2017 Monday    03:09:38
698.6        299.4
    100009 stapler          October   12,2017 Thursday  02:10:23
8.99            1
    100001 TV               August    12,2017 Saturday  10:08:30
```

```
211.65        37.35
    100003 pencil            October    08,2017 Sunday      09:10:50
4.95            0
    100011 pencil            October    16,2017 Monday      04:10:40
9.9             0
    100006 computer          October    12,2017 Thursday   03:10:10
349.3        149.7
    100007 lamp              September 10,2017 Sunday       05:09:20
35.91         3.99
    100002 camera            September 20,2017 Wednesday 11:09:36
118.4         29.6
    100013 lamp              August     30,2017 Wednesday 10:08:25
35.91         3.99


     PUR# product name       PTIME
TOTAL_PRICE     SAVINGS
---------- --------------
-----------------------------------------------------------------------
-------------------- ----------- ----------
    100014 powerbank         October    14,2017 Saturday   10:10:06
134.84        15.01
    100010 TV                September 19,2017 Tuesday      05:09:37
211.65        37.35
    100004 chair             August     23,2017 Wednesday 04:08:35
18.17         7.79

14 rows selected.

SQL>
SQL> start query7
SQL> select distinct eid from employees e, customers c      where
c.telephone# in(select telephone# from customers where
  2  substr(e.telephone#,0,3) = substr(c.telephone#,0,3)) order by eid
asc;

EID
---
e01
e02
e03
e04

SQL> start query8
SQL> select distinct c.name as name from customers c,purchases pr,
products p
  2              where visits_made >=2 and pr.cid in
  3                  (select cid from purchases pr where c.cid = pr.cid
and
  4                  trunc(c.last_visit_date) = trunc(pr.ptime)and
p.pid in
```

```
  5                  (select pid from products p where pr.pid = p.pid
and
  6                  (p.original_price * (1- p.discnt_rate)) < 100));

NAME
---------------
Connie
Mike

SQL>
SQL> start query9
SQL> select e.name from employees e where e.eid not in
  2  (select pr.eid from purchases pr where e.eid = pr.eid and pr.pid
not in
  3  (select p.pid from products p where p.original_price >=200) );

NAME
---------------
Mike

SQL>
SQL> select e.name from employees e where not exists
  2       (select pr.eid from purchases pr where e.eid = pr.eid and not
exists
  3       (select p.pid from products p where p.pid = pr.pid and
  4  p.original_price >=200));

NAME
---------------
Mike

SQL> start query10
SQL> select cid,name from customers c where not exists
  2  (select * from products p where pid in
  3  (select pid from purchases where cid = 'c005') and not exists
  4  (select * from purchases  where cid = c.cid and pid = p.pid));

CID  NAME
---- ---------------
c003 Chris
c005 Mike

SQL>
SQL> start query11
SQL> select c.cid from customers c where
to_char(c.last_visit_date,'YYYY') like '%2017%'
  2  and to_char(c.last_visit_date,'Month') like '%Oct%' and not
exists
  3  (select * from products p where p.original_price > 200 and not
exists
```

```
  4  (select * from purchases pr where pr.cid = c.cid and p.pid =
pr.pid));

CID
----
c001

SQL> start query12
SQL> select distinct e.eid, e.name from employees e, purchases pr
where e.eid = pr.eid and pr.pid in(
  2  select p.pid from products p, purchases pr where p.pid = pr.pid
and p.name ='chair' or p.name ='camera');

EID NAME
--- --------------
e01 David

SQL> start query13
SQL> select c.name from customers c, purchases pr
  2  where c.cid = pr.cid and pr.total_price in (select
max(pr.total_price)
  3  from purchases pr);

NAME
--------------
Chris

SQL> start query14
SQL> column original_price*discnt_rate heading 'discount amount'
SQL> select p.pid,p.name,original_price*discnt_rate from products p
where
  2  p.original_price * p.discnt_rate in
  3  (select max(p.original_price * p.discnt_rate)from products p);

PID  NAME            discount amount
---- --------------- ---------------
p008 computer                  149.7

SQL> start query15
SQL> column sum(total_price) heading 'Total Sale'
SQL> select to_char(ptime, 'YYYY/MM') as Month, sum(total_price) from
  2  purchases group by (to_char(ptime, 'YYYY/MM'));

MONTH    Total Sale
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2017/08     283.69
2017/09    1064.56
2017/10     627.18

SQL> start query16
```

```
SQL> column total heading 'total quantity sold'
SQL> select p.pid, p.name,temp.total
  2        from (select pid, sum(qty) total
  3            from purchases group by pid) temp, products p
  4               where p.pid = temp.pid and temp.total = (select
  5                   max(sum(qty))
  6                   from purchases group by pid);

PID  NAME              total quantity sold
---- --------------- -------------------
p004 pencil                           15

SQL> start query17
SQL> select pr.pur#, (pr.qty*p.original_price)- pr.total_price as
saving
  2  from purchases pr, products p where p.pid = pr.pid
  3      and (pr.qty*p.original_price)- pr.total_price = (select
  4  max((pr.qty*p.original_price)- pr.total_price)
  5      from purchases pr, products p where p.pid = pr.pid);

      PUR#       SAVING
---------- ----------
    100012      299.4

SQL> start query18
SQL> select pr.pur# from purchases pr where pr.total_price >=
  2  (select max(pr1.total_price) from purchases pr1 where pr1.cid
='c006');

      PUR#
----------
    100001
    100006
    100010
    100012

SQL>
SQL>
SQL> select pr.pur# from purchases pr where pr.total_price >= ( select
  2  pr1.total_price from purchases pr1
  3  where pr1.cid ='c006' and not exists (select pr2.total_price from
  4  purchases pr2 where pr2.cid ='c006' and pr2.total_price >
pr1.total_price));

      PUR#
----------
    100001
    100006
    100010
    100012
```

```
SQL> start query19
SQL> column amount heading 'total amount spent'
SQL> select c.cid, c.name, temp.amount
  2       from(select pr.cid, sum(pr.total_price) amount
  3       from purchases pr group by pr.cid
  4       order by amount desc) temp,
  5       customers c
  6       where c.cid = temp.cid and rownum<=3;

CID  NAME              total amount spent
---- --------------- -------------------
c003 Chris                       752.68
c001 Kathy                       679.35
c006 Connie                      221.55

SQL> start query20
SQL> column count(temp.pid) heading 'total number of customer'
SQL> select p.pid,p.name, count(temp.pid)
  2     from (select pid from purchases where to_char(ptime,'Month')
like
  3  '%Oct%'
  4         and to_char(ptime,'YYYY') like '%2017%' ) temp,
  5           products p
  6     where temp.pid (+) = p.pid
  7     group by p.pid,p.name
  8  order by p.pid;

PID  NAME              total number of customer
---- --------------- ------------------------
p001 stapler                         1
p002 TV                              0
p003 camera                          0
p004 pencil                          2
p005 chair                           0
p006 lamp                            0
p007 tablet                          1
p008 computer                        1
p009 powerbank                       1

9 rows selected.

SQL> spool off
```