

5420 Assignment-3-Team-19

SQL Workspace name: RSANADBMS

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The “Table_Structures.sql”, “Load1.sql”, “Load2_Part1.1.sql”, “Load2_Part1.2.sql” and “Load2_Part2.sql “ scripts have been uploaded and executed successfully in Oracle Apex workspace.

The various SQL code(s) for the respective scenarios in the questions are mentioned below.

Query01:

```
SELECT CUSTOMERID FROM CUSTOMER_T  
MINUS  
SELECT DISTINCT(CUSTOMERID) FROM ORDER_T;
```

Result:

CUSTOMERID
2
5
7

3 rows returned in 0.00 seconds

Query 02:

```
select * from employee_t e  
where employeeedatehired < (select max(employeeedatehired) from  
employee_t k where e. Employeeestate = k.Employeeestate  
group by Employeeestate);
```

Result:

EMPLOYEECITY	EMPLOYEESTATE	EMPLOYEEZIP	EMPLOYEEBIRTHDATE
Knoxville	TN		1/5/1957
Nashville	TN	54545	8/15/1963
Knoxville	TN	55555	8/25/1964

EMPLOYEEDEHIRED	EMPLOYEESUPERVISOR
6/12/2004	454-56-768
1/5/2004	454-56-768
1/1/2003	123-44-345

3 rows returned in 0.03 seconds

Query03:

```
Select Productid from orderline_t
group by Productid
having sum(orderedquantity) > 20;
```

Result:

PRODUCTID
2
3

2 rows returned in 0.01 seconds

Query04:

```
select e.employeename, e.employeebirthdate, m.employeename as Managername,
m.EMPLOYEEBIRTHDATE as Managerbirthdate from employee_t e, employee_t m
where e.employeesupervisor = m.employeeid and
e.EMPLOYEEBIRTHDATE < m.employeebirthdate;
```

Result:

EMPLOYEENAME	EMPLOYEEBIRTHDATE	MANAGERNAME	MANAGERBIRTHDATE
Phil Morris	1/5/1957	Robert Lewis	8/25/1964
Lawrence Haley	8/15/1963	Robert Lewis	8/25/1964

2 rows returned in 0.03 seconds

Query05:

```
select distinct(m.employeename) from employee_t e, employee_t m,
employeeskills_t es
where e.employeesupervisor = m.employeeid and
es.employeeid = e.employeeid and
es.skillid = 'BS12'
order by m.employeename;
```

Result:

EMPLOYEENAME
Phil Morris
Robert Lewis

2 rows returned in 0.00 seconds

Query06:

```
select customerid, count(orderid)
from order_t
where orderid in
(select orderid from order_t
MINUS
select orderid from payment_t)
group by customerid
order by customerid;
```

Result:

CUSTOMERID	COUNT (ORDERID)
1	4
3	1
4	23
6	3
8	2
9	3
12	5
13	1
14	1
15	1
16	3

11 rows returned in 0.07 seconds

Query07:

```
select DISTINCT (customerstate) from customer_t MINUS Select salespersonstate
from salesperson_t;
```

Result:

CUSTOMERSTATE
CA
IL
NJ
NM
TX
VA

6 rows returned in 0.03 seconds

Query08:

```
select s.employeename , count(e.employeesupervisor) AS HeadCount
FROM employee_t s, employee_t e
where e.employeesupervisor = s.employeeid
group by e.employeesupervisor, s.employeename
having count(e.employeeid) > 2;
```

Result:

EMPLOYEEENAME	HEADCOUNT
Robert Lewis	3

1 rows returned in 0.03 seconds

Query09:

```
select workcenterid, count(employeeid) from worksin_t
group by workcenterid;
```

Result:

WORKCENTERID	COUNT (EMPLOYEEID)
Tampa1	1
SM1	1

2 rows returned in 0.03 seconds

Query10:

```
select s.vendorid, s.materialid from supplies_t s, rawmaterial_t r
where s.materialid = r.materialid
and s.supplyunitprice >= 4*(r.materialstandardprice);
```

Result:

VENDORID	MATERIALID
3	NC1/4
3	NF1/4
3	NOW1/4
3	NST1/4
3	NUT1/4
1	1/21010OAK
1	1/21012OAK
1	1/21016OAK
1	1/2104OAK
1	1/2108OAK
1	1/21210OAK
1	1/21212OAK
1	1/21216OAK
1	1/2124OAK
1	1/2128OAK
1	1/2210OAK
1	1/2212OAK
1	1/2216OAK

1	1/224OAK
1	1/228OAK
1	1/2310OAK
1	1/2312OAK
1	1/2316OAK
1	1/234OAK
1	1/238OAK
1	1/2410OAK
1	1/2412OAK
1	1/2416OAK
1	1/244OAK
1	1/248OAK
1	1/2610OAK
1	1/2612OAK
1	1/2616OAK
1	1/264OAK
1	1/268OAK
1	1/2810OAK
1	1/2812OAK
1	1/2816OAK
1	1/284OAK
1	1/288OAK
1	3/41010OAK
1	3/41012OAK
1	3/41016OAK
1	3/4104OAK
1	3/4108OAK
1	3/41210OAK
1	3/41212OAK
1	3/41216OAK
1	3/4124OAK
1	3/4128OAK
1	3/4210OAK
1	3/4212OAK
1	3/4216OAK
1	3/424OAK
1	3/428OAK
1	3/4310OAK
1	3/4312OAK
1	3/4316OAK
1	3/434OAK

1	3/438OAK
1	3/4410OAK
1	3/4412OAK
1	3/4416OAK
1	3/444OAK
1	3/448OAK
1	3/4610OAK
1	3/4612OAK
1	3/4616OAK
1	3/464OAK
1	3/468OAK
1	3/4810OAK
1	3/4812OAK
1	3/4816OAK
1	3/484OAK
1	3/488OAK
1	3/81010OAK
1	3/81012OAK
1	3/81016OAK
1	3/8104OAK
1	3/8108OAK
1	3/81210OAK
1	3/81212OAK
1	3/81216OAK
1	3/8124OAK
1	3/8128OAK
1	3/8210OAK
1	3/8212OAK
1	3/8216OAK
1	3/824OAK
1	3/828OAK
1	3/8310OAK
1	3/8312OAK
1	3/8316OAK
1	3/834OAK
1	3/838OAK
1	3/8410OAK
1	3/8412OAK
1	3/8416OAK
1	3/844OAK
1	3/848OAK

1	3/8610OAK
1	3/8612OAK
1	3/8616OAK
1	3/864OAK
1	3/868OAK
1	3/8810OAK
1	3/8812OAK
1	3/8816OAK
1	3/884OAK
1	3/888OAK
1	5/81010OAK
1	5/81012OAK
1	5/81016OAK
1	5/8104OAK
1	5/8108OAK
1	5/81210OAK
1	5/81212OAK
1	5/81216OAK
1	5/8124OAK
1	5/8128OAK
1	5/8210OAK
1	5/8212OAK
1	5/8216OAK
1	5/824OAK
1	5/828OAK
1	5/8310OAK
1	5/8312OAK
1	5/8316OAK
1	5/834OAK
1	5/838OAK
1	5/8410OAK
1	5/8412OAK
1	5/8416OAK
1	5/844OAK
1	5/848OAK
1	5/8610OAK
1	5/8612OAK
1	5/8616OAK
1	5/864OAK
1	5/868OAK
1	5/8810OAK

1	5/8812OAK
1	5/8816OAK
1	5/884OAK
1	5/888OAK

145 rows returned in 0.06 seconds

Query11:

```
select distinct(m.employeename) from employee_t e, employee_t m,
employeeskills_t es
where e.employeesupervisor = m.employeeid and
es.employeeid = e.employeeid and
es.skillid = 'BS12'
order by m.employeename;
```

Result:

EMPLOYEENAME
Phil Morris
Robert Lewis

2 rows returned in 0.00 seconds

Query12:

```
Select Customername, COUNT(VendorID)as NumVendors
from customer_t c left outer join vendor_t v
on c.customerstate = v.vendorstate
group by customername;
```

Result:

CUSTOMERNAME	NUMVENDORS
Furniture Gallery	0
Dunkins Furniture	0
Eastern Furniture	0
Home Furnishings	0
Ikards	0
Value Furnitures	1
Flanigan Furniture	1
New Furniture	0
Janet's Collection	0
A Carpet	0
ABC Furniture Co.	0
Wild Bills	0
Impressions	0
Contemporary Casuals	1

14 rows returned in 0.04 seconds

Query13:

```
select customerid, CUSTOMERNAME from customer_t
where customerpostalcode IN (select customerpostalcode from customer_t
where customerid = 16);
```

Result:

CUSTOMERID	CUSTOMERNAME
9	A Carpet
16	ABC Furniture Co.

2 rows returned in 0.01 seconds

Query14:

```

select c.customerid, c.customername, o.orderid
from customer_t c left outer join order_t o
on c.customerid = o.customerid
order by o.orderid;

```

Result:

CUSTOMERID	CUSTOMERNAME	ORDERID
4	Eastern Furniture	1
3	Home Furnishings	2
1	Contemporary Casuals	3
6	Furniture Gallery	4
4	Eastern Furniture	5
4	Eastern Furniture	6
1	Contemporary Casuals	7
4	Eastern Furniture	8
6	Furniture Gallery	9
4	Eastern Furniture	19
4	Eastern Furniture	20
4	Eastern Furniture	21
4	Eastern Furniture	22
4	Eastern Furniture	23
1	Contemporary Casuals	24
4	Eastern Furniture	25
4	Eastern Furniture	26
4	Eastern Furniture	27
4	Eastern Furniture	28
4	Eastern Furniture	29
4	Eastern Furniture	30
15	Janet's Collection	31
15	Janet's Collection	32
15	Janet's Collection	34
8	Dunkins Furniture	35
4	Eastern Furniture	36
4	Eastern Furniture	37
4	Eastern Furniture	38
4	Eastern Furniture	39

4	Eastern Furniture	40
12	Flanigan Furniture	41
4	Eastern Furniture	42
12	Flanigan Furniture	43
6	Furniture Gallery	44
12	Flanigan Furniture	45
1	Contemporary Casuals	46
12	Flanigan Furniture	47
1	Contemporary Casuals	48
4	Eastern Furniture	49
8	Dunkins Furniture	50
16	ABC Furniture Co.	51
16	ABC Furniture Co.	52
16	ABC Furniture Co.	53
16	ABC Furniture Co.	54
16	ABC Furniture Co.	55
9	A Carpet	56
9	A Carpet	57
14	Wild Bills	58
13	Ikards	59
4	Eastern Furniture	63
4	Eastern Furniture	64
4	Eastern Furniture	65
9	A Carpet	66
4	Eastern Furniture	69
4	Eastern Furniture	71
12	Flanigan Furniture	73
1	Contemporary Casuals	75
4	Eastern Furniture	76
7	New Furniture	
2	Value Furnitures	
5	Impressions	

61 rows returned in 0.02 seconds

Query15:

```

select productid, productdescription
from product_t p1
where productstandardprice <
(select avg(productstandardprice) from product_t p2
 where p1.productlineid = p2.productlineid
 group by productlineid)
order by productid;

```

Result:

PRODUCTID	PRODUCTDESCRIPTION
1	Cherry End Table
2	Birch Coffee Tables
5	Writer's Desk
7	48 Bookcase
8	48 Bookcase
10	96 Bookcase
11	4-Drawer Dresser
13	Nightstand
14	Writer's Desk
18	6' Grandfather Clock
21	Pine End Table
25	

12 rows returned in 0.03 seconds

Query16:

```

select w.workcenterid
from worksin_t w, employeeskills_t es
where w.employeeid = es.employeeid AND es.skillid = 'QC1'
group by w.workcenterid
having count(es.employeeid) >= 1;

```

Result:

WORKCENTERID
SM1

1 rows returned in 0.01 seconds

Query17:

```
select employeeid, employeeename
from employee_t
```

MINUS

```
select e.employeeid, e.employeeename
from employee_t e, employeeskills_t es, skill_t s
where e.employeeid = es.employeeid and es.skillid = s.skillid
and s.skilldescription = 'Router'
```

```
order by employeeename;
```

Result:

EMPLOYEEID	EMPLOYEEENAME
Laura	Laura Ellenburg
332445667	Lawrence Haley
555955585	Mary Smith

3 rows returned in 0.05 seconds

Query18:

```
select o.orderid, o.customerid, o.orderdate, ol.productid,
p.productdescription
from order_t o, orderline_t ol, product_t p
where o.orderid = ol.orderid and ol.productid = p.productid
and o.customerid = 4;
```


Result:

ORDERID	CUSTOMERID	ORDERDATE	PRODUCTID	PRODUCTDESCRIPTION
1	4	9/8/2014	2	Birch Coffee Tables
1	4	9/8/2014	6	8-Drawer Dresser
1	4	9/8/2014	10	96 Bookcase
5	4	7/28/2014	1	Cherry End Table
5	4	7/28/2014	6	8-Drawer Dresser
25	4	3/10/2015	2	Birch Coffee Tables
26	4	3/10/2015	1	Cherry End Table
28	4	3/10/2015	1	Cherry End Table
39	4	3/11/2015	2	Birch Coffee Tables
49	4	3/11/2015	1	Cherry End Table
63	4	3/11/2015	3	Oak Computer Desk
65	4	3/11/2015	4	Entertainment Center
69	4	3/11/2015	7	48 Bookcase
71	4	9/8/2015	3	Oak Computer Desk

14 rows returned in 0.03 seconds

Query19:

```
SELECT p.productid, p.productdescription, p.productstandardprice,
SUM(u.quantityrequired * r.materialstandardprice) as TotCost
from product_t p, uses_t u, rawmaterial_t r
where p.productid = u.productid and u.materialid = r.materialid
group by p.productid, p.productdescription, p.productstandardprice;
```

Result:

PRODUCTID	PRODUCTDESCRIPTION	PRODUCTSTANDARDPRICE	TOTCOST
4	Entertainment Center	1650	931.6
3	Oak Computer Desk	750	353.2
1	Cherry End Table	175	99.7

6	8-Drawer Dresser	750	231.25
2	Birch Coffee Tables	200	135.4
18	6' Grandfather Clock	890	108

6 rows returned in 0.09 seconds

Query20:

```
Select s.salespersonname, p.productfinish, Sum(ol.orderedquantity) AS TotSales
from salesperson_t s, order_t o, orderline_t ol, product_t p
where s.salespersonid = o.salespersonid
and o.orderid = ol.orderid
and ol.productid = p.productid
group by s.salespersonname, p.productfinish;
```

Result:

SALESPERSONNAME	PRODUCTFINISH	TOTSALES
Robert Lewis	Cherry	1
William Strong	Birch	32
Robert Lewis	Birch	2
Jacob Winslow	Oak	5
Pepe Lepue	Cherry	0
Pepe Lepue	Oak	5
Robert Lewis	Walnut	4
Julie Dawson	Oak	10
Julie Dawson	Birch	10
Robert Lewis	Leather	5
Mary James	Birch	2
Jacob Winslow	Cherry	1
Fred Flinstone	Cherry	2
William Strong	Cherry	9
William Strong	Oak	23
Jacob Winslow	Birch	3
Mary James	Oak	3

17 rows returned in 0.02 seconds

Query21:

```
select workcenter_t.workcenterid, count(productid) AS TotalProducts
from workcenter_t left outer join producedin_t on workcenter_t.workcenterid =
producedin_t.workcenterid
group by workcenter_t.workcenterid;
```

Result:

WORKCENTERID	TOTALPRODUCTS
SM1	0
Tampa1	14
WR1	0

3 rows returned in 0.00 seconds

Query22:

```
select territoryid, territoryname from territory_t
where territoryid >= (select avg(territoryid) from doesbusinessin_t where cust
omerid in (
    select distinct customerid from customerShipAddress_t
));
```

Result:

TERRITORYID	TERRITORYNAME
3	NorthEast
4	NorthWest
5	Central
6	Alaska
12	Hawaii
13	Colorado
15	Arizona

7 rows returned in 0.04 seconds

Query23:

```

select o.Customerid, SUM(ol.orderedquantity) from order_t o, orderline_t ol,
product_t p
where o.orderid = ol.orderid and
ol.productid = p.productid and
p.productdescription LIKE '%Computer Desk'
group by o.Customerid
order by o.Customerid;

```

Result:

CUSTOMERID	SUM (OL.ORDEREDQUANTITY)
3	12
4	5
6	1
14	1
16	5

5 rows returned in 0.03 seconds

Query24:

```

select p.productdescription, SUM(ol.orderedquantity) from product_t p, orderli
ne_t ol
where p.productid = ol.productid
group by p.productdescription
order by p.productdescription;

```

Result:

PRODUCTDESCRIPTION	SUM (OL.ORDEREDQUANTITY)
48 Bookcase	6
8-Drawer Dresser	7
96 Bookcase	9
Amoire	1
Birch Coffee Tables	30
Cherry End Table	12

Entertainment Center	6
High Back Leather Chair	5
Nightstand	2
Oak Computer Desk	24
Writer's Desk	25

11 rows returned in 0.03 seconds

Query25:

```

SELECT p.productid, productdescription, c.customerid, customername,
sum(ol.orderedquantity) AS TotalOrdered
from customer_t c, product_t p, orderline_t ol, order_t o
where c.customerid = o.customerid and
o.orderid = ol.orderid and
ol.productid = p.productid
group by p.productid, productdescription, c.customerid, customername
having sum(ol.orderedquantity) >= ALL(SELECT SUM(ol2.orderedquantity)
FROM orderline_t ol2, order_t o2
    where ol2.productid = p.productid and ol2.orderid = o2.orderid and
o2.customerid <> c.customerid
    group by o2.customerid) order by p.productid;

```

Result:

PRODUCTID	PRODUCTDESCRIPTION	CUSTOMERID	CUSTOMERNAME	TOTALORDERED
1	Cherry End Table	4	Eastern Furniture	9
2	Birch Coffee Tables	4	Eastern Furniture	26
3	Oak Computer Desk	3	Home Furnishings	12
4	Entertainment Center	16	ABC Furniture Co.	4
5	Writer's Desk	15	Janet's Collection	10
6	8-Drawer Dresser	4	Eastern Furniture	4
7	48 Bookcase	4	Eastern Furniture	4
8	48 Bookcase	3	Home Furnishings	2
10	96 Bookcase	4	Eastern Furniture	9
13	Nightstand	13	Ikards	2
14	Writer's Desk	15	Janet's Collection	10
17	High Back Leather Chair	1	Contemporary Casuals	5
20	Amoire	8	Dunkins Furniture	1

13 rows returned in 0.03 seconds

-----XXXXXXXXXXXXXXXXXXXXX-----