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CIS 442

Assignment 2

**/\*1. List supplier number and supplier name for those suppliers that have status of 10 or 20\*/**

select s#,sname

from S

where status in (10,20);

/\*

S# SNAME

-- -----

S1 Smith

S2 Jones

S4 Clark

\*/

**/\*2. List part number and part name for those parts that their color is Red and their weight between 14 and 17\*/**

select p#,pname

from P

where color = 'Red'

and weight BETWEEN 14 and 17;

/\*\*

P# PNAME

-- -----

P4 Screw

\*\*/

**/\*3. List part number and part name for those parts that have been shipped in quantity greater than 200\*/**

select p#,pname

from P

where p# in (select p# from SP

where qty > 200

group by p#);

/\*

P# PNAME

-- -----

P1 Nut

P2 Bolt

P3 Screw

P4 Screw

P5 Cam \*/

**/\*4. List supplier number and supplier name for those suppliers that have supplied red color parts\*/**

select s#,sname

from s

where s# in (select s#

from sp join p on sp.p# = p.p#

where p.color = 'Red');

/\*

S# SNAME

-- -----

S1 Smith

S2 Jones

S4 Clark\*/

**/\*5. List supplier number, supplier name, and total quantity of all parts they have supplied\*/**

select sp.s#, s.sname, sum(sp.qty) as total\_quantity

from sp join s on sp.s# = s.s#

group by sp.s#,s.sname

order by sp.s#;

/\*S# SNAME TOTAL\_QUANTITY

-- ----- -----------

S1 Smith 1300

S2 Jones 700

S3 Black 200

S4 Clark 900\*/

**/\*6. List part number and part name and their total quantity that have been shipped\*/**

select sp.p#, p.pname, sum(sp.qty) as total\_quantity

from p join sp on sp.p# = p.p#

group by sp.p#, p.pname

order by sp.p#

/\*

P# PNAME TOTAL\_QUANTITY

-- ----- --------------

P1 Nut 600

P2 Bolt 1000

P3 Screw 400

P4 Screw 500

P5 Cam 500

P6 Cog 100\*/

**/\*7. Give supplier name that supplies the maximum quantity of parts. \*/**

select sname

from s

where s# in (select s#

from sp

where qty in ( select MAX(qty)

from sp));

/\*

SNAME

-----

Smith

Jones

Clark\*/

**/\*8. Give name of the supplier whose supplies red parts and whose weight is greater than 10\*/**

select sname

from s

where s# in (select s#

from sp join p

on sp.p# = p.p#

where p.color = 'Red'

and p.weight > 10);

/\*

SNAME

-----

Smith

Jones

Clark\*/

**/\*9. Give all part numbers that are from the same city. Make sure the result does not have any duplicate\*/**

select distinct sp.p#

from sp join s

on sp.s# = s.s#

where sp.s# in (select distinct a.s#

from s a inner join s b

on a.s# <> b.s#

where a.city = b.city)

order by sp.p#;

/\*

P#

--

P1

P2

P3

P4

P5

P6

\*/

**/\*10. Give pair of supplier numbers that are from the same city\*/**

Select a.s#, b.s#

from s a inner join s b

on a.s# <> b.s#

where a.city = b.city

and a.s# < b.s#

order by a.s#;

/\*

S# S#

-- --

S1 S4

S2 S3\*/

**/\*11. Give part (number and name) that has the minimum quantity\*/**

select p#, pname

from p

where p# in (select p# from sp where qty in (select MIN(qty) from sp))

/\*

P# PNAME

-- -----

P5 Cam

P6 Cog

\*/

**/\*12. Give names of the suppliers who supplies the most parts and suppliers who supplies least parts\*/**

column supplier format a8

(select s.s# as supplier, count(sp.p#) as number\_of\_parts

from s join sp

on s.s# = sp.s#

group by s.s#

having count(sp.p#) = (

select MAX(part)

from (select s# as supplier, count(p#) as part from sp group by s#)))

union

(select s.s# as supplier, count(sp.p#) as number\_of\_parts

from s join sp

on s.s# = sp.s#

group by s.s#

having count(sp.p#) = (

select MIN(part)

from (select s# as supplier, count(p#) as part

from sp group by s#)));

/\*

SUPPLIER NUMBER\_OF\_PARTS

-------- ---------------

S1 6

S3 1 1

\*/

**/\*13. Give total quantity of all blue parts\*/**

select p#, sum(qty)

from sp

where p# in (select p# from p where color = 'Blue')

group by p#;

/\*

P# SUM(QTY)

-- ----------

P3 400

P5 500

\*/

**/\*14. List supplier number and supplier name that are not supplying any part.\*/**

select s#, sname

from s

where s# not in (select s# from sp);

/\*

S# SNAME

-- -----

S5 Adams

\*/

**/\*15. Give top and bottom supplier number based on the quantity they supply. \*/**

(select \*

from sp

order by qty asc

fetch next 1 rows only)

union

(select \*

from sp

order by qty desc

fetch next 1 rows only);

/\*

S# P# QTY

-- -- ----------

S1 P3 400

S1 P5 100

\*/

**/\*16. Give top 3 parts (number and name) that weigh the least. \*/**

select p#, pname

from p

order by weight asc

fetch first 3 rows only;

/\*

P# PNAME

-- -----

P1 Nut

P5 Cam

P4 Screw

\*/

**/\*17. Give part number and part name that are not from London and whose color is not blue\*/**

select p#, pname

from p

where city not in ('London')

and color not in ('Blue');

/\*

P# PNAME

-- -----

P2 Bolt

\*/

**/\*18. Give name of suppliers that supply a red part\*/**

select distinct s.sname

from s join sp on s.s# = sp.s#

join p on p.p# = sp.p#

where p.color = 'Red';

/\*

SNAME

-----

Clark

Smith

Jones

\*/

**/\*19. Rank suppliers (supplier number and name) based on the total quantity of parts they supply.\*/**

column supplier\_# format a10

column supplier\_name format a13

select supplier\_#, supplier\_name, total\_quantity,

rank() over (order by total\_quantity desc) "RANK"

from (select sp.s# as supplier\_#, s.sname as supplier\_name, sum(sp.qty) as total\_quantity

from sp join s on sp.s# = s.s#

group by sp.s#, s.sname)

/\*

SUPPLIER\_# SUPPLIER\_NAME TOTAL\_QUANTITY RANK

---------- ------------- -------------- ----------

S1 Smith 1300 1

S4 Clark 900 2

S2 Jones 700 3

S3 Black 200 4

\*/

**/\*20. List supplier number for the top 25% of suppliers in terms of total parts supplied\*/**

select s#, count(p#) as total\_parts

from sp

group by s#

order by total\_parts desc

fetch first 25 percent rows only;

/\*

S# TOTAL\_PARTS

-- -----------

S1 6

\*/