Lab 2- part 2

1. Give two different approaches to get supplier names for suppliers who do not supply parts supplied by S3.

SELECT SNAME

FROM S

WHERE SNO not in

(select SNO from SP where PNO in (SELECT PNO from SP where SNO = ‘S3’))

SELECT SNAME

FROM S

WHERE NOT EXISTS

(select \* from SP join SP as SP2 on SP.PNO = SP2.PNO where sp2.SNO = ‘S3’ and SP.SNO = S.SNO)

1. Get part numbers and suppliers’ names for all parts shipped by more than one supplier without using Having Count (\*) anywhere in your SQL statement.[Hint must use re-name to join a table with itself]

SELECT distinct SP.PNO, SNAME

FROM S join SP on S.SNO = SP.SNO

join SP as SP2 on SP.PNO = SP2.PNO and SP.SNO != SP2.SNO

The basic idea, if we two SP records that have the same PNO but different SNO, then the part represented by the PNO is shipped by more than one supplier.

1. Get part names for parts supplied by all suppliers

SELECT PNAME

FROM P

WHERE NOT EXISTS

( SELECT \*

FROM S

WHERE NOT EXISTS

( SELECT \* from SP where SP.PNO =P.PNO and SP.SNO = S.SNO)

1. Get supplier names for suppliers who supply at least all those parts supplied by supplier S7.   
   [Do not even start this one unless you completely understand Q3]

SELECT PNAME

FROM S

WHERE NOT EXISTS

( SELECT \*

FROM P

WHERE PNO IN (SELECT PNOT FROM SP WHERE SNO = ‘S7’)

AND NOT EXISTS

( SELECT \* from SP where SP.PNO =P.PNO and SP.SNO = S.SNO)

1. Get the supplier’s name for the suppler that has the most shipment in terms of QTY. Your query should return one record. [Hint: research on using TOP for SQL Server or LIMIT for MySQL. Yes, research is necessary].

SELECT SNAME

FROM S

WHERE SNO IN (SELECT TOP 1 SNO FROM SP GROUP BY SNO ORDER BY SUM(QTY) DESC)

OR

SELECT SNAME

FROM S

WHERE SNO = (SELECT TOP 1 SNO FROM SP GROUP BY SNO ORDER BY SUM(QTY) DESC)

1. Get the supplier names for the suppliers that only ship red parts.

SELECT SNAME

FROM S

WHERE SNO IN (SELECT SNO FROM SP join P on SP.PNO = P.PNO where color = ‘RED’)

And SNO NOT IN (SELECT SNO FROM SP join P on SP.PNO = P.PNO where color != ‘RED’)

1. Using the DELETE

DELETE FROM SP WHERE SNO = ‘S1’ and PNO = ‘P2’

1. Using DELETE twice, once on SP, then on S

DELETE FROM SP WHERE SNO = ‘S3’;

DELETE FROM S WHERE SNO = ‘S3’;