1. Find the names of suppliers who supply some red part.
   SELECT S.name
   FROM Supplier S, Parts P, Catalog C
   WHERE P.color ='red' AND C.pid=P.pid AND C.sid=S.sid
2. • Find the sids of suppliers who supply some red or green part.
   SELECT C.sid
   FROM Catalog C, Parts P
   WHERE (P.color ='red' Or P.color ='green') AND P.pid=C.pid
3. • Find the sids of suppliers who supply some red part or are at 221 Packer Street.
   SELECT S.sid
   FROM Supplier S
   WHERE S.address = '221 Packer street'
   OR S.sid IN (SELECT C.sid
                  FROM Part P, Catalog C
                     WHERE P.color='red' AND P.pid =C.pid)
4. • Find the sids of suppliers who supply every red or green part.
   SELECT C.sid
   FROM Catalog C
   WHERE NOT EXISTS (SELECT P.pid
                     FROM Parts P
                        WHERE (p.color='red' OR p.color='green')
                           AND (NOT EXIST (SELECT C1.sid FROM Catalog
   C1 WHERE C1.sid = C.sid AND C1.pid =p.pid)))
5. • Find the sids of suppliers who supply every red part or supply every green part.
   SELECT C.sid
   FROM Catalog C
   WHERE (NOT EXISTS (SELECT P.pid FROM PART P WHERE P.color='red' AND
                     (NOT EXIST (SELECT C1.sid
                     FROM Catalog C1 WHERE C1.sid = C.sid AND C1.pid =P.pid))))
   OR(NOT EXIST (SELECT P1.pid FROM Parts P1
                     WHERE P1.color='green' AND
                     (NOT EXISTS (SELECT C2.sid FROM Catalog C2 WHERE
                     C2.sid=C.sid AND C2.Pid= P1.pid))))

6. • Find pairs of sids such that the supplier with the first sid charges more for some part than the supplier with the second sid.
   SELECT C1.sid, C2.sid
   FROM Catalog C1, Catalog C2
   WHERE C1.pid=C2.pid AND C1.sid !=C2.sid
        AND C1.cost>C2.cost
7. • Find the pids of parts supplied by at least two different suppliers.
   SELECT C.pid
   FROM Catalog C
   WHERE EXIST (SELECT C1.sid

FROM Catalog C1
        WHERE C1.pid= C.pid AND C1.sid!=C.sid)