Raleigh Bumpers

Database Management Systems

Section 02

April 15, 2021

Part 3 Assignment

1. Query 1:
   SELECT *
   FROM zone
   ORDER BY zname ASC

2. Query 2:
   SELECT zone.zname, COUNT (lot.lid) AS lots_in_zones
   FROM zone
   LEFT OUTER JOIN lot ON zone.zname = lot.zname
   GROUP BY zone.zname
   ORDER BY zone.zname ASC

3. Query 3:
   SELECT lot.lotname, COUNT (space.lat) AS spaces
   FROM lot
   LEFT OUTER JOIN space ON lot.lid = space.lid AND special = false
   GROUP BY lot.lotname
   ORDER BY COUNT (space.lat) DESC

4. Query 4:
   SELECT lot.zname, COUNT (space.lat) AS spots_in_zones
   FROM lot
   LEFT OUTER JOIN space
   ON space.lid = lot.lid
   GROUP BY lot.lid
   ORDER BY COUNT (space.lat) DESC

5. Query 5:
   SELECT lot.lotname, lot.zname, COUNT (space.vacant) AS spots
   FROM lot
   LEFT OUTER JOIN space ON lot.lid = space.lid
   AND space.vacant = true AND space.special = false
   GROUP BY lot.lotname, lot.zname
   ORDER BY lot.lotname ASC , lot.zname ASC

6. Query 6:
   SELECT lotname
   FROM allowed, lot
   WHERE canpark = zname AND type = 'Staff' AND from_ = '00:00:00' AND to_ = '23:59:00'
   AND dow = 'Mon'
   ORDER BY lotname ASC

7. Query 7:
   SELECT lotname
   FROM allowed, lot
   WHERE canpark = zname AND type = 'Commuter North' AND from_ = '00:00:00' AND to_ =
   '23:59:00' AND dow = 'Mon'
   ORDER BY lotname ASC

8. Query 8:
   SELECT lotname
   FROM allowed, lot
   WHERE canpark = zname AND type = 'Resident North' AND from_ = '00:00:00' AND to_
   BETWEEN '06:59:00' AND '23:59:00' AND dow = 'Tue'
   ORDER BY lotname ASC

9. Query 9:
   SELECT lotname, lat, long
   FROM allowed
   JOIN lot
   ON allowed.canpark = lot.zname
   JOIN space
   ON space.lid = lot.lid
   WHERE type = 'Commuter East' AND from_ = '00:00:00' AND to_ = '23:59:00' AND dow =
   'Mon' AND vacant = 'true'

References

SQLBolt: https://sqlbolt.com/lesson/select_queries_with_expressions

LearnSQL: https://learnsql.com/blog/how-to-join-3-tables-or-more-in-sql/

Military Time Chart: http://militarytimechart.com/

Counting Zero Results: https://stackoverflow.com/questions/14793057/how-to-include-zero-0-results-in-count-aggregate