

Consider the following schema:

Suppliers(*sid*: integer, *sname*: string, *address*: string)

Parts(*pid*: integer, *pname*: string, *color*: string)

Catalog(*sid*: integer, *pid*: integer, *cost*: real)

The Catalog relation lists the prices charged for parts by Suppliers.

Write the following queries in SQL:

1. Find the *pnames* of parts for which there is some supplier.
2. Find the *snames* of suppliers who supply every part.
3. Find the *snames* of suppliers who supply every red part.
4. Find the *pnames* of parts supplied by Acme Widget Suppliers and no one else.
5. Find the *sids* of suppliers who charge more for some part than the average cost of that part (averaged over all the suppliers who supply that part).
6. For each part, find the *sname* of the supplier who charges the most for that part.
7. Find the *sids* of suppliers who supply only red parts.
8. Find the *sids* of suppliers who supply a red part and a green part.
9. Find the *sids* of suppliers who supply a red part or a green part.
10. For every supplier that only supplies green parts, print the name of the supplier and the total number of parts that she supplies.
11. For every supplier that supplies a green part and a red part, print the name and price of the most expensive part that she supplies.