Homework Seven Solutions

Due Friday, November 8th, 2002, at 5:00pm.

Your task

Do problem 50 from page 263 of Brookshear, and problems 11 and 12 from pages 397–398 of Brookshear.

Submitting your solution

Write up an email message containing your full name and the answer to these problems in plain text format (this means no HTML or Microsoft word documents), and send it to aspnes+110-02-7@cs.yale.edu. (Note: this is not the same email address as for previous homework.)

Solution:

Problem 5.50

1. bigger(rex, lassie).
2. bigger(fido, lassie).
3. bigger(spot, lassie).

Problem 9.11

• a.

TEMPP <- SELECT from MANUFACTURER where PartName = 'Bolt 2Z'
RESULT <- PROJECT CompanyName from TEMPP

• b.

TEMPP <- SELECT from MANUFACTURER where CompanyName = 'Company X'
RESULT <- PROJECT PartName, Cost from TEMPP

• c. Here is one possibility. It also works (and may be more efficient) to do the SELECT on PART first and then do the JOIN.

TEMPP <- JOIN PART and MANUFACTURER
          where PART.PartName = MANUFACTURER.PartName
TEMPQ <- SELECT from TEMPP where Weight = 1
RESULT <- PROJECT CompanyName from TEMPQ

Problem 9.12

• a.

SELECT CompanyName from MANUFACTURER where PartName = 'Bolt 2Z'

• b.
SELECT PartName, Cost
    from MANUFACTURER
    where CompanyName = 'Company X'

• c.

SELECT CompanyName
    from PART, MANUFACTURER
    where
        PART.PartName = MANUFACTURER.PartName
        and PART.Weight = 1