

CMSC 508

HW 4

Due: March 23

1. True or false: Join distributes over union
2. True or false: Join distributes over restrict

The next questions use the following relations:

S	S#	SNAME	STATUS	CITY
	S1	Smith	20	London
	S2	Jones	10	Paris
	S3	Blake	30	Paris
	S4	Clark	20	London
	S5	Adams	30	Athens

P	P#	PNAME	COLOR	WEIGHT	CITY
	P1	Nut	Red	12.0	London
	P2	Bolt	Green	17.0	Paris
	P3	Screw	Blue	17.0	Oslo
	P4	Screw	Red	14.0	London
	P5	Cam	Blue	12.0	Paris
	P6	Cog	Red	19.0	London

SP	S#	P#	QTY
	S1	P1	300
	S1	P2	200
	S1	P3	400
	S1	P4	200
	S1	P5	100
	S1	P6	100
	S2	P1	300
	S2	P2	400
	S3	P2	200
	S4	P2	200
	S4	P4	300
	S4	P5	400

For each of the following give the relational algebra query:

3. Find all the names of all the suppliers based in London
4. Find all part numbers and quantities supplied by supplier S4
5. Find all the part numbers supplied by supplier Smith
6. Find the names of all the suppliers who supply Blue parts

Now create the tables above in Access. Make sure you define the foreign keys that are needed.

7. Write queries in Access for each of 3 through 6 above. Save the whole database including the queries (it is an .accdb file) and e-mail it to me as an attachment
8. Do some research. Can you find any way in Access to affect or alter the physical level representation of the data?