

HW2

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2. Relational Algebra

$\pi_{name}(\sigma_{county='Polk', month='December'}(liquors \times_{lid=liquors} sales)) \cap \pi_{name}(\sigma_{county='Linn', month='December'}(liquors \times_{lid=liquors} sales));$

$\pi_{man1}(\sigma_{man1=man2}(\rho(C(1 \rightarrow man1, 4 \rightarrow man2), \pi_{manufacturer, seller, liquors}(\sigma_{county='Polk', month='January'}(liquors \times_{lid=liquors} sales) \times_{seller, liquors} \pi_{manufacturer, seller, liquors}(\sigma_{county='Polk', month='January'}(liquors \times_{lid=liquors} sales))))))$

3. More Relational Algebra

(1)

B	D
x	c
y	a
x	a

(2)

(A)	B	D	(A)
1	x	c	1
3	y	a	1
3	x	a	1
1	x	c	3
3	y	a	3
3	x	a	3

(3)

(A)	(B)	C	(A)	(B)	D
1	x	a	3	y	a
1	x	a	3	x	a

(4)

Empty table

(6)

Empty table