

CPSC 304 Tutorial 7

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1. $\rho_{SB1}(\pi_{sid, sname, bid, color}(sailors \bowtie reserved \bowtie boats))$
 $\rho_{SB2}(\pi_{sid, sname, bid, color}(sailors \bowtie reserved \bowtie boats))$
 $\pi_{sname, color} \sigma_{SB1.sid=SB2.sid \wedge SB1.bid \neq SB2.bid \wedge SB1.color=SB2.color} (SB1 \bowtie SB2)$
2. $\rho_{RB}(\pi_{sid, bid}(reserved) / \pi_{bid}(\sigma_{color='red'}(boats)))$
 $\pi_{sname}(sailors \bowtie RB)$
3. $\rho_S(\pi_{sid}(\sigma_{rating > 7}(sailors)))$
 $\rho_B \pi_{bname, color, sid}(boats \bowtie reserved)$
 $\pi_{bname, color}(B/S)$
4. $\rho_{S1}(sailors)$
 $\rho_{S2}(sailors)$
 $\pi_{sname}(\pi_{sname, rating}(sailors) - \pi_{S1.sname, S1.rating}(\sigma_{S1.rating > S2.rating}(S1 \times S2)))$
5. $\rho_{S1}(sailors)$
 $\rho_{S2}(sailors)$
 $\pi_{sname, age}(\pi_{sname, rating, age}(sailors) - \pi_{S1.sname, S1.rating, S1.age}(\sigma_{S1.age < S2.age}(S1 \times S2)))$