

Dou Kessai Participation Exercise

Sailors(Sid, name, rating, age)
boats(bid, bnam, color)
reserves(sid, bid, day)

Relational Algebra

1) names of sailors who didn't reserve boat '103'

$$\pi_{\text{name}}(\sigma_{\text{bid} \neq '103'}(\rho_{\text{sid} \rightarrow \text{sid}_1}(\text{sailors}) \times \text{reserves}))$$

2) Names of sailors who reserved a blue boat
on 3/13/2020

$$\pi_{\text{name}}(\sigma_{\text{color} = \text{Blue}}(\rho_{\text{bid} \rightarrow \text{bid}_1}(\text{boats})))$$

$$\rightarrow \sigma_{\text{date} = '3/13/2020'}(\rho_{\text{bid} \rightarrow \text{bid}_1}(\text{reserves}))$$