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- ① $\{s.sid \mid \text{sailor}(s)\}$
- ② $\{(s.sid, s.sname, s.rating) \mid \text{sailor}(s) \wedge ((s.rating \geq 2 \wedge s.rating < 8) \vee (s.rating > 10 \wedge s.rating \leq 11))\}$
- ③ $\{(b.bid, b.name, b.color) \mid \text{boat}(b) \wedge (\exists r \exists s (\text{sailor}(s) \wedge \text{reserves}(r) \wedge s.sid = r.sid \wedge r.bid = b.bid \wedge b.color \neq 'red' \wedge s.rating > 7))\}$
- ④ $\{b.bid, b.name \mid \text{boat}(b) \wedge (\exists r1.bid \mid \text{reserves}(r1) \wedge (r1.day = 'Saturday' \vee r1.day = 'Sunday')) \wedge \neg (\exists r2.bid \mid \text{reserves}(r2) \wedge r2.day = 'Tuesday')\}$
- ⑤ $\{r.sid \mid \text{reserves}(r) \wedge (\exists b (\text{boat}(b) \wedge r.bid = b.bid \wedge b.color = 'red')) \wedge (\exists r1.sid \mid \text{reserves}(r1) \wedge (\exists b1 (\text{boat}(b1) \wedge r1.bid = b1.bid \wedge b1.color = 'green')))\}$

$$\textcircled{6} \{ s.sid, s.sname \mid \text{sailor}(s) \wedge (\exists r_1 \exists r_2 (\text{reserves}(r_1) \wedge \text{reserves}(r_2) \wedge \\ r_1.sid = r_2.sid \wedge r_1.bid \neq r_2.bid \wedge \\ r_1.sid = s.sid)) \}$$

$$\textcircled{7} \{ r_1.sid, r_2.sid \mid \text{reserves}(r_1) \wedge \text{reserves}(r_2) \wedge r_1.sid \neq r_2.sid \wedge \\ r_1.bid = r_2.bid \}$$

$$\textcircled{8} \{ s.sid \mid \text{sailor}(s) \wedge \neg (\exists r.sid (\text{reserves}(r) \wedge \\ (r.day = 'Monday' \vee r.day = 'Tuesday')))) \}$$

$$\textcircled{9} \{ r.sid, b.bid \mid \text{reserves}(r) \wedge \text{boat}(b) \wedge r.bid = b.bid \wedge b.color \neq 'red' \wedge (\exists s (\text{sailor}(s) \wedge \\ s.sid = r.sid \wedge s.rating > 6)) \}$$

$$\textcircled{10} \{ b.\text{bid} \mid \text{boat}(b) \wedge \neg (\exists r_1 \exists r_2 (\text{reserves}(r_1) \wedge \text{reserves}(r_2) \wedge r_1.\text{bid} = r_2.\text{bid} \wedge r_1.\text{sid} \neq r_2.\text{sid})) \}$$

$$\textcircled{11} \{ s.\text{sid} \mid \text{sailor}(s) \wedge \neg (\exists r_1 \exists r_2 \exists r_3 (\text{reserves}(r_1) \wedge \text{reserves}(r_2) \wedge \text{reserves}(r_3) \wedge r_1.\text{sid} = r_2.\text{sid} \wedge r_1.\text{sid} = r_3.\text{sid} \wedge r_1.\text{bid} \neq r_2.\text{bid} \wedge r_1.\text{bid} \neq r_3.\text{bid} \wedge r_2.\text{bid} \neq r_3.\text{bid})) \}$$