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Assignment08_DML

```
2      -- 1. Find the sailors who get rating greater than 5 and is over than 30 years old
3 •    SELECT sname
4      FROM sailors
5      WHERE rating > 5.0 AND age > 30;
6
7
8      -- 2  Find the names of sailors who have reserved boat 104
```

sname
Dustin
Lubber
Rusty
Horatio
Horatio

```
7
8      -- 2. Find the names of sailors who have reserved boat 104.
9 •    SELECT sname
10     FROM Sailors
11     WHERE sid IN (SELECT sid FROM Reserves WHERE bid = 104);
12
13     -- 3. Find the names of sailors who have reserved a red boat
14 •   SELECT sname
```

sname
Dustin
Lubber

```sql
13      -- 3. Find the names of sailors who have reserved a red boat
14 ●    SELECT sname
15      FROM Sailors
16      WHERE sid IN (SELECT sid FROM Reserves R JOIN Boats B ON R.bid = B.bid WHERE B.color = 'red');
17
18      -- 4. Find the colors of boats reserved by Lubber
19 ●    SELECT DISTINCT B.color
20      FROM Boats B
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ⊞A

sname
Dustin
Lubber
Horatio

```sql
18      -- 4. Find the colors of boats reserved by Lubber
19 ●    SELECT DISTINCT B.color
20      FROM Boats B
21      JOIN Reserves R ON B.bid = R.bid
22      JOIN Sailors S ON R.sid = S.sid
23      WHERE S.sname = 'Lubber';
24
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ⊞A

color
red
green

```sql
25      -- 5. Find the names of sailors who have reserved at least one boat.
26 ●    SELECT DISTINCT sname
27      FROM Sailors
28      WHERE sid IN (SELECT sid FROM Reserves);
29
30      -- 6. Find the names of sailors who have reserved a red or a green boat
31 ●    SELECT DISTINCT S.sname
32      FROM Sailors S
33      JOIN Reserves R ON S.sid = R.sid
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ⊞A

sname
Dustin
Lubber
Horatio

```sql
30      -- 6. Find the names of sailors who have reserved a red or a green boat
31  •   SELECT DISTINCT S.sname
32      FROM Sailors S
33      JOIN Reserves R ON S.sid = R.sid
34      JOIN Boats B ON R.bid = B.bid
35      WHERE B.color IN ('red', 'green');
36
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: 𝐀

sname
Dustin
Lubber
Horatio

```sql
37      -- 7. Find the names of sailors who have reserved a red and a green boat.
38  •   SELECT sname
39      FROM Sailors
40  ⊖ WHERE sid IN (
41          SELECT sid
42          FROM Reserves
43          JOIN Boats ON Reserves.bid = Boats.bid
44          WHERE color = 'red'
45      ) AND sid IN (
46          SELECT sid
47          FROM Reserves
48          JOIN Boats ON Reserves.bid = Boats.bid
49          WHERE color = 'green'
50      );
51
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: 𝐀

sname
Dustin
Lubber

```sql
52      -- 8. Find the names of sailors who have reserved at least two boats.
53  •   SELECT sname
54      FROM Sailors
55  ⊖ WHERE sid IN (
56          SELECT sid
57          FROM Reserves
58          GROUP BY sid
59          HAVING COUNT(*) >= 2
60      );
61
62      -- 9. Find the names of sailors with age over 20 who have not reserved a red boat.
63  •   SELECT sname
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: 𝐀

sname
Dustin
Lubber
Horatio

```
62      -- 9. Find the names of sailors with age over 20 who have not reserved a red boat.
63  ●   SELECT sname
64      FROM Sailors
65      WHERE age > 20 AND sid NOT IN (
66          SELECT sid
67          FROM Reserves
68          JOIN Boats ON Reserves.bid = Boats.bid
69          WHERE color = 'red'
70      );
71
72      -- 10. Find the names of boat that is reserved by Dustin but not by Lubber.
73  ●   SELECT b.Bname
74      FROM Boats b
75      JOIN Reserves r ON b.bid = r.bid
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |

sname
Brutus
Andy
Rusty
Horatio
Art
Bob

```
72      -- 10. Find the names of boat that is reserved by Dustin but not by Lubber.
73  ●   SELECT b.Bname
74      FROM Boats b
75      JOIN Reserves r ON b.bid = r.bid
76      JOIN Sailors s ON r.sid = s.sid
77      WHERE s.sname = 'Dustin' AND b.bid NOT IN (
78          SELECT r1.bid
79          FROM Reserves r1
80          JOIN Sailors s1 ON r1.sid = s1.sid
81          WHERE s1.sname = 'Lubber'
82      );
83
84
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |

Bname
Interlake