Jake Holovka

CS-300

Assignment 2

1. List only the name and rating for all Sailors. **(4 points)**
   1. **π  sname, rating (S)**
2. List all sailor information for sailors with a rating>8). **(4 points)**
   1. **σ rating > 8 (S)**
3. List the boat id for boats all red boats.  **(4 points)**
   1. **π bid( σcolor = red (B))**
4. List the boat id for all red boats and all green boats.  **(4 points)**
   1. **π bid ( σcolor = red or green (B))**
5. List the name of every sailor who is aged 16 or under.  **(4 points)**
   1. **π sname ( σage<=16 (S))**
6. List the name and rating for all sailors who have a rating of 7 and below.  **(4 points)**
   1. **π sname,rating( σrating <= 7 (S))**
7. Count the number of reservations for boat number 4.  **(4 points)**
   1. ρR (myCount) ζCOUNT bid ( **σbid = 4 (R))**
8. Find the names of sailors who have reserved boat 103.  **(4 points)**
   1. **σS.sid = R.sid(πsid, sname (S)) X (πsid(σbid = 103 (R)))**
9. Find the names of sailors who have reserved a red boat.  **(4 points)**
   1. **(πsid, sname (S)) ⋈ (πsid, bid (R)) ⋈ (πbid (σcolor = red (B)))**
10. Find the colors of the boats reserved by Lubber.  **(4 points)**
    1. (**πbid, color (B)) ⋈ (πsid, bid (R)) ⋈ (πsid (σsname = Lubber (S)))**
11. Find the names of sailors who have reserved a red and green boat.  **(5 points)**
    1. (**πsid, sname (S)) ⋈ (πsid, bid (R)) ⋈ (πbid (σcolor = red and green (B)))**
12. Find the names of sailors with age over 20 who have not reserved a red boat.  **(5 points)**
    1. (**πsid, sname (σage > 20 (S))) ⋈ (πsid, bid (R)) – (πbid (σcolor = red (B))) ⋈ (πsid, bid (R))**