1. List only the name and rating for all Sailors.

Πsname,rating(S)

1. List all sailor information for sailors with a rating>8.

σrating>8(S)

1. List the boat id for boats all red boats.

Πbid(σcolor=”red”(B))

1. List the boat id for all red boats and all green boats.

Πbid(σcolor=”red”V”green”(B))

1. List the name of every sailor who is aged 16 or under.

Π­sname(σage<17(S))

1. List the name and rating for all sailors who have a rating of 7 and below.

Πsname,rating(σrating<8(S))

1. Count the number of reservations for boat number 4.

ℑCOUNT(σbid=4(R))

1. Find the names of sailors who have reserved boat 103.

Πsname(σsid,sname(S) U σsid,bid=103(R))

1. Find the names of sailors who have reserved a red boat.

Πsname(σsid,sname(S) U (σbid,color=”red”(B) U σsid,bid(R)))

1. Find the colors of the boats reserved by Lubber.

Πcolor(σ(B) U (σsid,sname=”Lubber”(S) U σsid,bid(R)))

1. Find the names of sailors who have reserved a red and green boat.

Πsname(σsid,sname(S) U (σbid,color=”red”V”green”(B) U σsid,bid(R)))

1. Find the names of sailors with age over 20 who have not reserved a red boat.

Πsname(σsid,age>20(S) - σsid(R))