**q1:Encontre os Velejadores que reservaram o banco numero 103**

select \*

from sailor s natural join reserve r

where r.bid = 103;

marina=# select s.sname

marina-# from sailor s join reserve r on s.sid = r.sid

marina-# where r.bid = '103';

**q1a: E quem nunca reservou o barco 103:**

not in:

select \*

from sailor

where sid not in (select sid from reserve where bid=103);

select s\* from sailor except select s.\* from sailor s natural join reserve r where r.bid = 103;

**q2: Find the names of sailors who have reserved red boat**

select s.sname

from sailor s natural join reserve r natural join boat b

where (b.color = 'red');

**q3: Find the colors of boats reserved by Lubber**

select b.color

from boat b natural join reserve r natural join sailor s

where s.sname = 'Lubber';

**q4: Find the names of sailors who have reserved at least one boat:**

select s.sname

from sailor s natural join reserve r

**q5: Find the names of sailors who have reserved a red or a green boat**

select s.sname

from sailor s natural join reserve r natural join boat b

where b.color in (‘red’, ‘green’);

**q6: Find the names of sailors who have reserved both a red and a green boat**

select s.sname

from sailor s join reserve r on s.sid=r.sid join boat b on r.bid = b.bid

where s.sid in (select r.sid from reserve r natural join boat b where b.color = ‘green’)

and s.sid in (select r.sid from reserve r natural join boat b where b.color = ‘red’);

**q7: Find the names of sailors who have reserved at least two different boats (?)**

marina=# SELECT s.sname

marina-# FROM sailor s, reserve r, sailor s2, reserve r2

marina-# WHERE s.sid = r.sid

marina-# and s2.sid = r2.sid

marina-# and s.sid = s2.sid

marina-# and r.bid != r2.bid;

**q8: Find the names of sailors who have reserved all boats**

**q9: Compute increments for the ratings of persons who have sailed two differents boats on the same day**

**q10: Find the oldest sailor’s name**

select s.sname, s.age

marina-# from sailor s

marina-# where age = (select max(age) from sailor s);

**q11: Find the youngest sailor’s name**

marina=# select s.sname, s.age

marina-# from sailor s

marina-# where age = (select min(age) from sailor s);

**q12:** **Count the number of boats by color (?)**

select b.color, count(b.bid)

from boat b join reserve r on b.bid = r.bid

group by b.color;