Key to Quiz2

1. How to find name and id of sailors who reserved boats in October?

SELECT S.sname, S.sid FROM Sailors AS S, Reserves AS R WHERE S.sid = R.sid and Month(day)=10;

2. How to find names of sailors who have reserved boat #103 and reserved only one time?

SELECT S.sname
FROM Sailors AS S
WHERE exists
(Select *
from Reserves R1
where R1.bid =103 AND R1.sid = S.sid AND
NOT exists
(select *
from Reserves R2
where R2.bid = 103 AND R2.sid = R1.sid AND R1.day <> R2.day));

3. How to find names of sailors who've reserved all boats?

SELECT sname
FROM Sailors
WHERE not exists
(select *
from Boats
where not exists
(select *
from Reserves
where Sailors.sid=Reserves.sid
and Boats.bid=Reserves.bid))

4. How to find name of the oldest sailor who reserved "tiger" boat?

SELECT sname
FROM (SELECT B.bid, max(S.age) AS m FROM Sailors AS S, Reserves AS R, Boats AS B
WHERE S.sid = R.sid
AND R.bid = B.bid

AND B.bname = "Tiger"
GROUP BY B.bid) AS A, Sailors AS S2, Reserves AS R2
WHERE A.bid = R2.bid and S2.age = A.m and S2.sid = R2.sid;

5. How to find the name of boats which have been reserved more than two times. (Note: you should use operator: COUNT)

SELECT bname FROM Boats WHERE bid in (select bid from Reserves group by bid having count(*)>2);