COIS 3400H Lab 6

This Lab will practice the SQL statements on subquery, UNION, INTERSECT, EXISTS and NOT EXISTS. We will use the Sailors, Reserves, and Boats table developed in classes. The SQL is partially complete, you must complete the queries. Where you see the … that is where you will fill the rest of the query.

(Q1) Find the names of sailors who have reserved a red boat using a subquery:

SELECT S.sname

FROM Sailors S

WHERE S.sid IN(SELECT R.sid FROM Reserves R WHERE R.bid IN

(SELECT B.bid FROM Boats B WHERE B.color = 'red'));

(Q2) Find the names of sailors who have reserved a red or a green boat using UNION

SELECT S.sname

FROM Sailors S, Reserves R, Boats B

WHERE S.sid = R.sid AND R.bid = B.bid AND B.color = ’red’

### **UNION**

SELECT S.sname

FROM Sailors S, Reserves R, Boats B

WHERE S.sid = R.sid AND R.bid = B.bid AND B.color = 'green';

(Q3) Find the names of sailors who have reserved both a red and a green boat using INTERSECT

SELECT S.sname

FROM Sailors S, Reserves R, Boats B

WHERE S.sid = R.sid AND R.bid = B.bid AND B.color = ’red’

### **INTERSECT**

SELECT S.sname

FROM Sailors S, Reserves R, Boats B

WHERE S.sid = R.sid AND R.bid = B.bid AND B.color = 'green';

(Q4) Find the names of sailors who have NOT reserved boat number 103 (using NOT EXISTS):

SELECT S.sname

FROM Sailors S

WHERE NOT EXISTS (SELECT \* FROM Reserves R WHERE S.sid = R.sid AND R.bid = 103);