

IT 478 Lab #1

Copy the following DDL into SQL Developer and create the drop table Reserves, Sailors and Boats tables. Then answer questions 1-6 below

Use **SET ECHO ON** and **RUN SCRIPT** to submit a single file with both SQL and results.

Do not type out results – use **SET ECHO ON** to do this for you.

```
-- LAB #1 DDL--
```

```
-- DROP TABLES IF EXISTS.
```

```
DROP TABLE reserves;
```

```
DROP TABLE sailors;
```

```
DROP TABLE boats;
```

```
-- CREATE TABLES
```

```
CREATE TABLE sailors(
```

```
    sid      INT NOT NULL CONSTRAINT sailors_PK PRIMARY KEY,
```

```
    sname    VARCHAR2(20),
```

```
    rating   INT,
```

```
    age      DECIMAL(4,1)
```

```
);
```

```
CREATE TABLE boats(
```

```
    bid      INT NOT NULL CONSTRAINT BOAT_PK PRIMARY KEY,
```

```
    bname    VARCHAR2(20),
```

```
    color    VARCHAR2(20)
```

```
);
```

```
CREATE TABLE reserves(
```

```
    sid      INT,
```

```
    bid      INT,
```

```
    day      DATE,
```

```
    PRIMARY KEY (sid,bid,day),
```

```
    FOREIGN KEY (sid) REFERENCES sailors(sid) ON DELETE CASCADE,
```

```
    FOREIGN KEY (bid) REFERENCES boats(bid) ON DELETE CASCADE
```

```
);
```

```
-- INITIALIZE THE TABLES
```

```
INSERT INTO sailors (sid,sname,rating,age) VALUES(22,'Dustin',7,45.0);
INSERT INTO sailors (sid,sname,rating,age) VALUES(29,'Brutus',1,33.0);
INSERT INTO sailors (sid,sname,rating,age) VALUES(31,'Lubber',8,55.5);
INSERT INTO sailors (sid,sname,rating,age) VALUES(32,'Andy',8,25.5);
INSERT INTO sailors (sid,sname,rating,age) VALUES(58,'Rusty',10,35.0);
INSERT INTO sailors (sid,sname,rating,age) VALUES(64,'Horataio',7,35.0);
INSERT INTO sailors (sid,sname,rating,age) VALUES(71,'Zorba',10,16.0);
INSERT INTO sailors (sid,sname,rating,age) VALUES(74,'Horataio',9,35.0);
INSERT INTO sailors (sid,sname,rating,age) VALUES(85,'Art',3,25.5);
INSERT INTO sailors (sid,sname,rating,age) VALUES(95,'Bob',3,63.5);
```

```
INSERT INTO boats (bid,bname,color) VALUES(101,'Interlake','blue');
INSERT INTO boats (bid,bname,color) VALUES(102,'Interlake','red');
INSERT INTO boats (bid,bname,color) VALUES(103,'Clipper','green');
INSERT INTO boats (bid,bname,color) VALUES(104,'Marine','red');
```

```
INSERT INTO reserves(sid,bid,day) VALUES(58,101,'10-OCT-20');
INSERT INTO reserves(sid,bid,day) VALUES(58,102,'10-OCT-20');
INSERT INTO reserves(sid,bid,day) VALUES(58,103,'8-OCT-20');
INSERT INTO reserves(sid,bid,day) VALUES(29,104,'7-OCT-20');
INSERT INTO reserves(sid,bid,day) VALUES(29,102,'10-Nov-20');
INSERT INTO reserves(sid,bid,day) VALUES(71,103,'6-NOV-20');
INSERT INTO reserves(sid,bid,day) VALUES(74,104,'12-NOV-20');
INSERT INTO reserves(sid,bid,day) VALUES(64,101,'5-SEP-20');
INSERT INTO reserves(sid,bid,day) VALUES(64,102,'8-SEP-20');
INSERT INTO reserves(sid,bid,day) VALUES(74,103,'8-SEP-20');
```

```
COMMIT;
```

```
-- END LAB #1 DDL--
```

-- Lab #1 Questions

--1 Find the names of sailors who have reserved boat number 102

--2 Find the names of sailors who have reserved any boat other than boat number 102

EXTRA CREDIT

+2 points extra for --- find ALL sailors who have NEVER reserved boat 102

--3 Find the names of sailors who have reserved a blue boat

--4 Find the colors of boats reserved by Rusty

--5 Find the names of sailors who have reserved at least one boat

--6 Find the names of sailors who have reserved a red or a blue boat

-- DO NOT SUBMIT THIS PART

--7 After you have completed all of the above, drop the Reserves, Sailors and Boats tables (*SQL is shown above*)