3. Queries to Retrieve and Change Data: Select, Insert, Delete, and Update

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

SQL> select s.sname from sailors s, reserves r where s.sid=r.sid and r.bid=103;

```
SNAME
------------------------------------------------
DUSTIN
LUBBER
HORATIO
```

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

SQL> select distinct s.sname from sailors s,reserves r, boats b where s.sid=r.sid and r.bid=b.bid and b.color='RED';

```
SNAME
------------------------------------------------
DUSTIN
DUSTIN
LUBBER
LUBBER
HORATIO
```

3) Find the names and ages of all sailors;

SQL> select sname, age from sailors;

```
SNAME                          AGE
```

```
---------------------------------------------- ----------

DUSTIN                              45

BRUTUS                              33

LUBBER                              55.5

ANDY                                25.5

RUSTY                               35

HORATIO                             35

ZORBA                               16

HORATIO                             35

ART                   25.5

BOB                   63.5
```

10 rows selected.

SQL> select distinct s.sname, s.age from sailors s;   **/* With distinct clause /***

```
SNAME                              AGE

---------------------------------------------- ----------

ANDY                                25.5

ART                   25.5

BOB                   63.5

BRUTUS                              33

DUSTIN                              45

HORATIO                             35

LUBBER                              55.5

RUSTY                               35

ZORBA                               16
```

4) Find all sailors with a rating above 7

SQL> select s.sid,s.sname,s.rating,s.age from sailors s where s.rating>7;

       SID SNAME   RATING   AGE

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        31 LUBBER   8   55.5

        32 ANDY   8   25.5

        58 RUSTY   10   35

        71 ZORBA   10   16

        74 HORATIO   9   35

5) Find the names of boats reserved by lubber

SQL> select b.color from sailors s, boats b, reserves r

  where s.sid=r.sid and r.bid=b.bid and s.sname=upper('lubber');

COLOR

RED

GREEN

RED

6) Find the names of sailors who have reserved at least one boat.

SQL> select distinct s.sname from sailors s, reserves r where s.sid=r.sid;

SNAME

DUSTIN

HORATIO

LUBBER

7) Compute increments for the ratings of persons who have sailed two different boats on the same day.

SQL> select s.sname,s.rating+1 as rating from sailors s, reserves r1, reserves r2

  2   where s.sid=r1.sid and s.sid=r2.sid and r1.day=r2.day and r1.bid<>r2.bid;

SNAME	RATING
DUSTIN	8
DUSTIN	8

8) Find the ages of sailors whose name begins and ends with B and has not at least three characters

SQL> select s.age from sailors s where s.sname like 'B_%B';

AGE
63.5