



ADBMS Practical DCA6131

Question 1.) Consider the following database and find the colors boats reserved by Horatio

Table Name: Reserves

Table Name : Sailors

sid	sname	rating	age
22	Dustin	7	45.0
29	Brustin	1	33.0
31	Lubber	8	55.0
32	Andy	8	25.0
58	Rusty	10	32.0
64	Horatio	7	35.0
71	Zorba	10	16.0
74	Horatio	9	35.0
85	Art	3	25.3
95	Bob	3	63.5

sid	bid	Day
22	101	1998-10-10
64	101	1998-05-09
22	102	1998-05-09
31	102	1998-10-10
64	102	1998-10-11
22	103	1998-08-09
31	103	1998-08-10
74	103	1998-06-11
22	104	1998-07-09
31	104	1998-12-11

Table Name : Boats

bid	bname	color
101	Interlake	Blue
102	Interlake	Red
103	Clipper	green
104	Marine	red

Solution 1

```

SELECT DISTINCT b.color
FROM Boats b
JOIN Reserves r ON b.bid = r.bid
JOIN Sailors s ON r.sid = s.sid
WHERE s.sname = 'Horatio';

```

Question 2.) Consider the following tables and find sailor id's of sailors who have rating of at least 8 or reserved boat 103 .

Table Name : Sailors

sid	sname	rating	age
22	Dustin	7	45.0
29	Brustin	1	33.0
31	Lubber	8	55.0
32	Andy	8	25.0
58	Rusty	10	32.0
64	Horatio	7	35.0
71	Zorba	10	16.0
74	Horatio	9	35.0
85	Art	3	25.3
95	Bob	3	63.5

Table Name: Reserves

sid	bid	Day
22	101	1998-10-10
64	101	1998-05-09
22	102	1998-05-09
31	102	1998-10-10
64	102	1998-10-11
22	103	1998-08-09
31	103	1998-08-10
74	103	1998-06-11
22	104	1998-07-09
31	104	1998-12-11

Table Name : Boats

bid	bname	color
101	Interlake	Blue
102	Interlake	Red
103	Clipper	green
104	Marine	red

Solution 2

SELECT DISTINCT Sailors.sid

FROM Sailors

**LEFT JOIN Reserves ON
Sailors.sid = Reserves.sid**

**WHERE Sailors.rating >= 8
OR Reserves.bid = 103;**

Question 3.) Consider the following database and find name of the Sailors who have reserved at least one boat

Table Name : Sailors

sid	sname	rating	age
22	Dustin	7	45.0
29	Brustin	1	33.0
31	Lubber	8	55.0
32	Andy	8	25.0
58	Rusty	10	32.0
64	Horatio	7	35.0
71	Zorba	10	16.0
74	Horatio	9	35.0
85	Art	3	25.3
95	Bob	3	63.5

Table Name: Reserves

sid	bid	Day
22	101	1998-10-10
64	101	1998-05-09
22	102	1998-05-09
31	102	1998-10-10
64	102	1998-10-11
22	103	1998-08-09
31	103	1998-08-10
74	103	1998-06-11
22	104	1998-07-09
31	104	1998-12-11

Table Name : Boats

bid	bname	color
101	Interlake	Blue
102	Interlake	Red
103	Clipper	green
104	Marine	red

Solution 3

```
SELECT DISTINCT
Sailors.sname

FROM Sailors

JOIN Reserves ON Sailors.sid
= Reserves.sid;
```

Question 5.) Write a PL/SQL program to find Simple Interest if P= 2000 , R=6, T=5.

Solution 5

DECLARE

P NUMBER := 2000;

R NUMBER := 6;

T NUMBER := 5;

SI NUMBER;

BEGIN

SI := (P * R * T) / 100;

DBMS_OUTPUT.PUT_LINE('Principal Amount: ' || P);

DBMS_OUTPUT.PUT_LINE('Rate of Interest: ' || R);

DBMS_OUTPUT.PUT_LINE('Time Period: ' || T);

DBMS_OUTPUT.PUT_LINE('Simple Interest: ' || SI);

END;

Question 5.) Write a PL/SQL program to find the sum of odd number between 1 to 50 .

Solution 5

```
DECLARE

    total_sum NUMBER := 0;

BEGIN

    FOR i IN 1..50 LOOP

        IF MOD(i, 2) != 0 THEN

            total_sum := total_sum + i;

        END IF;

    END LOOP;

    DBMS_OUTPUT.PUT_LINE('The sum of odd numbers between 1 to 50 is:
' || total_sum);

END;
```