

## **LAB CYCLE II**

### **Q.SET 1**

Create the following tables and execute the queries given below

#### **SAILORS**

<b>sid</b>	<b>sname</b>	<b>rating</b>	<b>age</b>
22	Dustin	7	45
29	Brutas	1	33
31	Lubber	8	55
32	Andy	8	25
58	Rusty	10	35
64	Horatio	7	35
71	Zorba	10	16
74	Horatio	9	35
85	Art	3	26
95	Bob	3	64

#### **BOATS**

<b>Bid</b>	<b>bname</b>	<b>color</b>
101	Interlake	Blue
102	Interlake	Red
103	Clipper	Green
104	Marine	Red

#### **RESERVES**

<b>sid</b>	<b>bid</b>	<b>day</b>
22	101	10/10/98
22	102	10/10/98
22	103	10/8/98

22	104	10/7/98
31	102	11/10/98
31	103	11/6/98
31	104	11/12/98
64	101	9/5/98
64	102	9/8/98
74	103	9/8/98

1. Find the names and ages of all sailors
2. Find all information of sailors who have reserved boat number 101.
3. Find all sailors with rating above 7
4. Find the names of sailors who have reserved boat no 103
5. Find the names of sailors who have reserved a red boat, and list in the order of age.
6. Find the names of sailors who have reserved either a red or green boat
7. Find the colors of boats reserved by "Lubber".
8. Find the names of sailors who have reserved both red and green boats
9. Find the names of sailors who have reserved at least one boat
10. Find the ids and names of sailors who have reserved two different boats on the same day.
11. Find the name and the age of the youngest sailor.
12. Find the names and ratings of sailor whose rating is better than some sailor called Horatio.
13. Find the names of sailors who have reserved all boats.
14. Count the number of different sailor names.
15. Calculate the average age of all sailors.
16. Find the average age of sailors for each rating level.
17. Find the average age of sailors for each rating level that has at least two sailors.

## **Q.SET 2**

1. Create the table STUDENT\_INFO with Columns: Sid, Stud\_name & stude\_score.
  - Insert values into STUDENT\_INFO with the following constraints: Sid should be unique, Stud name NOT NULL and stude\_score DEFAULT value of 20.
  - Set Sid as primary key.
  - Update stude\_score by adding a value of 5 to stude\_score in the table STUDENT\_INFO for the rows satisfying the condition of stude\_score >150 (Using CASE)
2. Create the tables **worker** and **bonus** with the following fields. The primary key of Worker table is Worker\_ID. Set Worker\_id as foreign key of bonus on update and delete cascade constraints. Each constraint should be given a name

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20	HR
2	Niharika	Verma	80000	2014-06-11	Admin
3	Vishal	Singhal	300000	2014-02-20	HR
4	Amitabh	Singh	500000	2014-02-20	Admin
5	Vivek	Bhati	500000	2014-06-11	Admin
6	Vipul	Diwan	200000	2014-06-11	Account
7	Satish	Kumar	75000	2014-01-20	Account
8	Geetika	Chauhan	90000	2014-04-11	Admin

### 3. Sample Table – Bonus

WORKER_ID	BONUS_DATE	BONUS_AMOUNT
1	2016-02-20	5000
2	2016-06-11	3000
3	2016-02-20	4000
1	2016-02-20	4500
2	2016-06-11	3500

4. Write An SQL Query To Fetch “FIRST\_NAME” From Worker Table Using The Alias Name As <WORKER\_NAME>.
5. Write An SQL Query To Print All Worker Details From The Worker Table Order By FIRST\_NAME Ascending
6. Write An SQL Query To Print Details Of Workers Excluding First Names, “Vipul” And “Satish” From Worker Table.
7. Write An SQL Query To Print Details Of Workers With DEPARTMENT Name As “Admin”.
8. Write An SQL Query To Print Details Of The Workers Whose SALARY Lies Between 100000 And 500000
9. Write An SQL Query To Fetch “FIRST\_NAME” From Worker Table In Upper Case. (upper())
10. Write An SQL Query To Fetch Unique Values Of DEPARTMENT From Worker Table.
11. Write An SQL Query To Print First Three Characters Of FIRST\_NAME From Worker Table.( substring())
12. Write An SQL Query To Print The FIRST\_NAME From Worker Table After Removing White Spaces From The Right Side( RTRIM ( ))
13. Write An SQL Query To Print The DEPARTMENT From Worker Table After Removing White Spaces From The Left Side. ( LTRIM ( ))
14. Write An SQL Query That Fetches The Unique Values Of DEPARTMENT From Worker Table And Prints Its Length.( length())
15. Write An SQL Query To Print The FIRST\_NAME From Worker Table After Replacing ‘a’ With ‘A’.( REPLACE( ))

16. Find the First name , last name ,Department, Salary and Bonus of employees whose bonus amount is greater than 4000
17. Delete the employee with worker\_id=7 from worker and display the details of both tables.
18. Drop the foreign key constraint and add a new referential integrity constraint with 'on update or delete with no action'
19. Delete the employee with worker\_id = 8 from worker.

### **Q.SET 3**

Create the tables given below and execute the queries:

**Customer(Cust id : integer, cust\_name: string)**

**Item(item\_id: integer, item\_name: string, price: integer)**

**Sale(bill\_no: integer, bill\_date: date, cust\_id: integer, item\_id: integer, qty\_sold: integer)**

For the above schema, perform the following—

- a) Create the tables with the appropriate integrity constraints
- b) Insert details of 5 customers, 5 items and 10 sales details. There should be one customer 'rekha' who had purchased 3 different products on the same date. And there should be atleast one customer who had purchased 2 different products on the same date in the year '2018'.
- c) List the details of the customer who have bought a product which has a price>200
- d) Give a count of how many products have been bought by each customer group by bill date.
- e) Give a count of how many products have been bought by each customer group by bill date only for the year 2018.
- f) Give a list of products bought by a customer having cust\_id as 5
- g) List the item details which are sold as of today
- h) Print the bill in a neat format with the quantity sold, price of the item and the final amount of customer 'rekha'