

LAB1. DEVELOPING AND QUERYING MY RESTAURANTS DATABASE

Question1. Create a table called MyRestaurants with the following attributes;

- **Name of the restaurant: a varchar field**
- **Type of food they make: a varchar field (food type: veg, nonveg, Chinese)**
- **Distance (in minutes) from your house: an integer**
- **Date of your last visit: a varchar field, interpreted as date**
- **Whether you like it or not: an integer, interpreted as a Boolean**

```
SQL> create table my_restaurants (rname varchar2(15), foodtype varchar2(10), distance
number (2), lastvisit varchar2(15), ilike varchar2(5));
```

Table created.

Name	Null?	Type

RNAME		VARCHAR2(30)
FOODTYPE		VARCHAR2(20)
DISTANCE		NUMBER (10)
LASTVISIT		VARCHAR2(15)
ILIKE		VARCHAR2(2)

Question2. Insert at least five tuples using the SQL insert command seven (or more) times. you should insert at least one restaurant you liked, at least one restaurant you did not like, and at least one restaurant where you leave the ilike field null;

```
SQL> insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '&
ilike');
```

Enter value for rname: apple_leaf

Enter value for foodtype: nonveg

Enter value for distance: 15

Enter value for lastvisit: 01-Jan-2020

Enter value for ilike: 1

old 1: insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values ('apple_leaf', 'nonveg', '15', '01-Jan-2020', '1')

1 row created.

SQL> /

Enter value for rname: sowmyas

Enter value for foodtype: veg

Enter value for distance: 18

Enter value for lastvisit: 20-Mar-2020

Enter value for ilike: 1

old 1: insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values ('sowmyas', 'veg', '18', '20-Mar-2020', '1')

1 row created.

SQL> /

Enter value for rname: thinnappa

Enter value for foodtype: nonveg

Enter value for distance: 25

Enter value for lastvisit: 20-Nov-2019

Enter value for ilike: 0

old 1: insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values ('thinnappa', 'nonveg', '25', '20-Nov-2019', '0')

1 row created.

SQL> /

Enter value for rname: sribhavan

Enter value for foodtype: veg

Enter value for distance: 18

Enter value for lastvisit: 20-Dec-2019

Enter value for ilike: 0

old 1: insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values ('sribhavan', 'veg', '18', '20-Dec-2019', '0')

1 row created.

SQL> /

Enter value for rname: chinaworld

Enter value for foodtype: chinese

Enter value for distance: 14

Enter value for lastvisit: 05-Mar-2020

Enter value for ilike: 1

old 1: insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values ('chinaworld', 'chinese', '14', '05-Mar-2020', '1')

1 row created.

SQL> /

Enter value for rname: littlechina

Enter value for foodtype: chinese

Enter value for distance: 30

Enter value for lastvisit: 10-Mar-2020

Enter value for ilike: 0

old 1: insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values ('littlechina', 'chinese', '30', '10-Mar-2020', '0')

1 row created.

SQL> /

Enter value for rname: munivilas

Enter value for foodtype: nonveg

Enter value for distance: 20

Enter value for lastvisit: 05-Dec-2019

Enter value for ilike: null

old 1: insert into my_restaurants values ('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values ('munivilas', 'nonveg', '20', '05-Dec-2019', 'null')

1 row created.

SQL> /

Enter value for rname: dosacorner

Enter value for foodtype: nonveg

Enter value for distance: 10

Enter value for lastvisit: 05-Feb-2020

Enter value for ilike: 1

old 1: insert into my_restaurants values('& rname', '& foodtype', '& distance', '& lastvisit', '& ilike')

new 1: insert into my_restaurants values('dosacorner', 'nonveg', '10', '05-Feb-2020', '1')

1 row created.

Question3. Write a SQL query that returns all restaurants in your table;

SQL> select * from my_restaurants;

RNAME	FOODTYPE	DISTANCE	LASTVISIT	ILIKE
-----	-----	-----	-----	-----
apple_leaf	nonveg	15	01-Jan-2020	1
sowmyas	veg	18	20-Mar-2020	1
thinnappa	nonveg	25	20-Nov-2019	0
sribhavan	veg	18	20-Dec-2019	0
chinaworld	chinese	14	05-Mar-2020	1
littlechina	chinese	30	10-Mar-2020	0
munivilas	nonveg	20	05-Dec-2019	null
dosacorner	nonveg	10	05-Feb-2020	1

Question4. Now, experiment with a few output formats, using the SQL query you wrote for question3.

PRINT THE RESULTS IN COMMA-SEPARATED FORM

SQL> select listagg(rname,',') within group(order by rname) Restaurant_name from my_restaurants;

RESTAURANT_NAME

apple_leaf,chinaworld,dosacorner,littlechina,munivilas,sowmyas,sribhavan,thinnappa

PRINT THE RESULTS IN LIST FORM, DELIMITED BY “|”

```
SQL> select listagg(rname,'|')within group(order by rname) Restaurant_name from  
my_restaurants;
```

RESTAURANT_NAME

apple_leaf|chinaworld|dosacorner|littlechina|munivilas|sowmyas|sribhavan|thinnap
pa

PRINT THE RESULTS IN COLUMN FORM, AND MAKE EACH COLUMN HAVE WIDTH 15;

```
SQL> set numwidth 15;
```

```
SQL> select * from my_restaurants;
```

RNAME	FOODTYPE	DISTANCE	LASTVISIT	ILIKE
-----	-----	-----	-----	-----
apple_leaf	nonveg	15	01-Jan-2020	1
sowmyas	veg	18	20-Mar-2020	1
thinnappa	nonveg	25	20-Nov-2019	0
sribhavan	veg	18	20-Dec-2019	0
chinaworld	chinese	14	05-Mar-2020	1
littlechina	chinese	30	10-Mar-2020	0
munivilas	nonveg	20	05-Dec-2019	null
dosacorner	nonveg	10	05-Feb-2020	1

Question6. Write a SQL query that returns only the name and distance of all restaurants within and including 20 minutes of you house. the query should list the restaurants in alphabetical order of names;

SQL> select rname,distance from my_restaurants where distance<=20 order by rname asc;

RNAME	DISTANCE
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apple_leaf	15
chinaworld	14
dosacorner	10
munivilas	20
sowmyas	18
sribhavan	18

Question7. Write a SQL query that returns the names of restaurants in descending order that makes Chinese foods.

SQL> select rname from my_restaurants where foodtype='chinese' order by rname desc;

RNAME

littlechina
chinaworld

Question9. Write a SQL query that returns all restaurants that you like, but have not visited since more than 3 months ago.

SQL> select rname from my_restaurants where ilike='1' and lastvisit<sysdate;

RNAME

apple_leaf

sowmyas

chinaworld

dosacorner

Question10. Write a SQL query that returns all restaurants names that are within and including 15 mins from your house where you like chines foods.

SQL> select rname from my_restaurants where distance<=15 and foodtype='chinese';

RNAME

Chinaworld