

IT For Sustainable Future

Assignment 2
Structured Query Language

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```
/* Sayan Bandyopadhyay - 24PGDM085 - Section B */
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/* ITSF Assignment 2 */
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```
/* Questions */
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```
/* QUESTIONS
```

1. Update Clemmie's phone number to 783-732-7754.
2. Find the address and phone number of all the customers in FL.
3. Show the first name and birth date of all the customers living in FL, VA, CO, TX, IL.
4. Show discount for each customer. Discount factor is calculated as points/100.
5. Find the oldest customer. */

```
/* ANSWERS */
```

```
USE `first database` ; -- specifying to use the 'first database' that has the 'customer' table  
select * from customer; -- Viewing the table for Clemmie's info
```

```
/* Solution for Question 1 */
```

```
UPDATE customer
```

```
SET phone = '783-732-7754' -- using SET Clause to specify what column in the customer will be  
updated with what information
```

```
where first_name = 'Clemmie'; -- using where clause to specify whose data in the phone column  
needs to be changed
```

```
select * from customer; -- Viewing the table to see if the changes were reflected or not
```

```
/* Output :-
```

Table output :-

1	Barbara MacCaffrey	1986-03-28	781-932-9754	0 Sage Terrace	Waltham	MA
	2273					
2	Ines Brushfield	1986-04-13	804-427-9456	14187 Commercial Trail		
	Hampton	VA	947			
3	Freddi Boagey	1985-02-07	719-724-7869	251 Springs Junction	Colorado Springs	
	CO	2967				

4	Ambur	Roseburgh	1974-04-14	407-231-8017	30 Arapahoe Terrace	Orlando
	FL	457				
5	Clemmie	Betchley	1973-11-07	783-732-7754	5 Spohn Circle	Arlington
	TX	3675				
6	Elka	Twiddell	1991-09-04	312-480-8498	7 Manley Drive	Chicago
	3073					IL
7	Ilene	Dowson	1964-08-30	615-641-4759	50 Lillian Crossing	Nashville
	TN	1672				
8	Thacher	Naseby	1993-07-17	941-527-3977	538 Mosinee Center	Sarasota
	FL	205				
9	Romola	Rumgay	1992-05-23	559-181-3744	3520 Ohio Trail	Visalia
	1486					CA
10	Levy	Mynett	1969-10-13	404-246-3370	68 Lawn Avenue	Atlanta
						GA
						796

*/

Screenshot -

	customer_id	first_name	last_name	birth_date	phone	address	city	state	points
▶	1	Barbara	MacCaffrey	1986-03-28	781-932-9754	0 Sage Terrace	Waltham	MA	2273
	2	Ines	Brushfield	1986-04-13	804-427-9456	14187 Commercial Trail	Hampton	VA	947
	3	Freddi	Boagey	1985-02-07	719-724-7869	251 Springs Junction	Colorado Springs	CO	2967
	4	Ambur	Roseburgh	1974-04-14	407-231-8017	30 Arapahoe Terrace	Orlando	FL	457
	5	Clemmie	Betchley	1973-11-07	783-732-7754	5 Spohn Circle	Arlington	TX	3675
	6	Elka	Twiddell	1991-09-04	312-480-8498	7 Manley Drive	Chicago	IL	3073
	7	Ilene	Dowson	1964-08-30	615-641-4759	50 Lillian Crossing	Nashville	TN	1672
	8	Thacher	Naseby	1993-07-17	941-527-3977	538 Mosinee Center	Sarasota	FL	205
	9	Romola	Rumgay	1992-05-23	559-181-3744	3520 Ohio Trail	Visalia	CA	1486
*	10	Levy	Mynett	1969-10-13	404-246-3370	68 Lawn Avenue	Atlanta	GA	796
*	HULL	HULL	HULL	HULL	HULL	HULL	HULL	HULL	HULL

-- (2. Find the address and phone number of all the customers in FL.)

/*Solution Question 2 */

SELECT address, phone -- Selecting which columns to show

FROM customer -- selecting the table from where the columns will be shown

WHERE state = 'FL'; -- using where clause to filter states with name 'FL'

/* Output

30 Arapahoe Terrace 407-231-8017

538 Mosinee Center 941-527-3977 */

Screenshot -

Result Grid		Filter Rows:
	address	phone
▶	30 Arapahoe Terrace	407-231-8017
	538 Mosinee Center	941-527-3977

select * from customer; -- Viewing the table for information

-- (3. Show the first name and birth date of all the customers living in FL, VA, CO, TX, IL.)

/*Solution for Question 3 */

SELECT first_name, birth_date -- Showing first name and birthdate

FROM customer -- selecting the table from where the columns will be shown

WHERE state IN ('FL', 'VA', 'CO', 'TX', 'IL'); -- using where clause to filter states with name FL, VA, CO, TX, IL.

/*OUTPUT

Ines 1986-04-13

Freddi 1985-02-07

Ambur 1974-04-14

Clemmie 1973-11-07

Elka 1991-09-04

Thacher 1993-07-17 */

Screenshot -

Result Grid		Filter Row
	first_name	birth_date
▶	Ines	1986-04-13
	Freddi	1985-02-07
	Ambur	1974-04-14
	Clemmie	1973-11-07
	Elka	1991-09-04
	Thacher	1993-07-17

/* This can also be done in the way shown below in case we want to show the full name - */

SELECT concat(first_name, ' ', last_name) AS FullName, birth_date -- using concat to show the first name and last name together in one column

FROM customer -- selecting the table from where the columns will be shown

WHERE state IN ('FL', 'VA', 'CO', 'TX', 'IL'); -- using where clause to filter states with name FL, VA, CO, TX, IL.

```
/* Output  
Thacher Naseby      1993-07-17  
Elka Twiddell    1991-09-04  
Ines Brushfield 1986-04-13  
Freddie Boagey   1985-02-07  
Amber Roseburgh  1974-04-14  
Clemmie Betchley 1973-11-07 */
```

Screenshot –

The screenshot shows a 'Result Grid' interface with a table containing two columns: 'FullName' and 'birth_date'. The data is as follows:

	FullName	birth_date
▶	Ines Brushfield	1986-04-13
	Freddie Boagey	1985-02-07
	Amber Roseburgh	1974-04-14
	Clemmie Betchley	1973-11-07
	Elka Twiddell	1991-09-04
	Thacher Naseby	1993-07-17

-- (4. Show discount for each customer. Discount factor is calculated as points/100.)

```
/*Solution for Question 4 */  
select * from customer; -- Viewing the table  
SELECT -- selecting columns which will be shown in the output  
customer_id,  
first_name,  
last_name,  
birth_date,  
phone,  
city,  
address,  
city,  
state,  
points,  
(points / 100) AS discount -- showing discount in another column called 'discount'
```

FROM customer;

/* Output

1	Babara	MacCaffrey	1986-03-28	781-932-9754	Waltham	0 Sage Terrace	MA	2273	22.7300
2	Ines	Brushfield	1986-04-13	804-427-9456	Hampton	14187 Commercial Trail	VA	947	9.4700
3	Freddi	Boagey	1985-02-07	719-724-7869	Colorado Springs	251 Springs Junction	CO	2967	29.6700
4	Ambur	Roseburgh	1974-04-14	407-231-8017	Orlando	30 Arapahoe Terrace	FL	457	4.5700
5	Clemmie	Betchley	1973-11-07	783-732-7754	Arlington	5 Spohn Circle	TX	3675	36.7500
6	Elka	Twiddell	1991-09-04	312-480-8498	Chicago	7 Manley Drive	IL	3073	30.7300
7	Ilene	Dowson	1964-08-30	615-641-4759	Nashville	50 Lillian Crossing	TN	1672	16.7200
8	Thacher	Naseby	1993-07-17	941-527-3977	Sarasota	538 Mosinee Center	FL	205	2.0500
9	Romola	Rumgay	1992-05-23	559-181-3744	Visalia	3520 Ohio Trail	CA	1486	14.8600
10	Levy	Mynett	1969-10-13	404-246-3370	Atlanta	68 Lawn Avenue	GA	796	7.9600 */

Screenshot –

	customer_id	first_name	last_name	birth_date	phone	city	address	city	state	points	discount
▶	1	Babara	MacCaffrey	1986-03-28	781-932-9754	Waltham	0 Sage Terrace	Waltham	MA	2273	22.7300
	2	Ines	Brushfield	1986-04-13	804-427-9456	Hampton	14187 Commercial Trail	Hampton	VA	947	9.4700
	3	Freddi	Boagey	1985-02-07	719-724-7869	Colorado Springs	251 Springs Junction	Colorado Springs	CO	2967	29.6700
	4	Ambur	Roseburgh	1974-04-14	407-231-8017	Orlando	30 Arapahoe Terrace	Orlando	FL	457	4.5700
	5	Clemmie	Betchley	1973-11-07	783-732-7754	Arlington	5 Spohn Circle	Arlington	TX	3675	36.7500
	6	Elka	Twiddell	1991-09-04	312-480-8498	Chicago	7 Manley Drive	Chicago	IL	3073	30.7300
	7	Ilene	Dowson	1964-08-30	615-641-4759	Nashville	50 Lillian Crossing	Nashville	TN	1672	16.7200
	8	Thacher	Naseby	1993-07-17	941-527-3977	Sarasota	538 Mosinee Center	Sarasota	FL	205	2.0500
	9	Romola	Rumgay	1992-05-23	559-181-3744	Visalia	3520 Ohio Trail	Visalia	CA	1486	14.8600
	10	Levy	Mynett	1969-10-13	404-246-3370	Atlanta	68 Lawn Avenue	Atlanta	GA	796	7.9600

-- (5. Find the oldest customer)

/*Solution for Question 5 */

-- Displaying the age wise oldest customer

Select *

from customer

ORDER BY birth_date ASC Limit 1; -- ordering the data into ascending order according to the 'birth_date' column and limiting the number of output to 1

/* OUTPUT

7 Ilene Dowson 1964-08-30 615-641-4759 50 Lillian Crossing Nashville
TN 1672 */

Screenshot –