FACULTY OF COMPUTING
UTM Johor Bahru

SECD2523
SECTION 10

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PROJECT TITLE:
SQL LAB3
(DML3)
PART2

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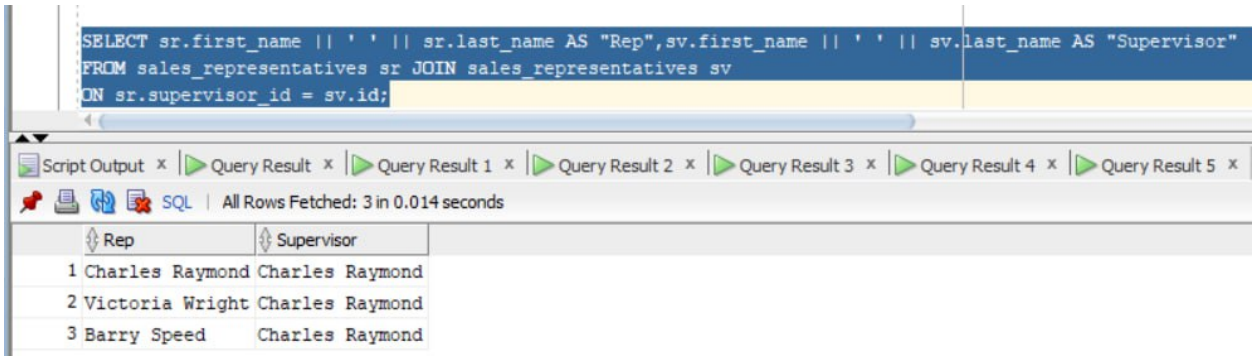
Part 1 : Use a Self-Join to Join a Table to Itself (S6L9 Objective 2)

1. Write a query that will display who the supervisor is for each of the sales representatives. The information should be displayed in two columns, the first column will be the first name and last name of the sales representative and the second will be the first name and last name of the supervisor. The column aliases should be Rep and Supervisor.

```
SELECT sr.first_name || ' ' || sr.last_name AS "Rep",sv.first_name || ' ' ||
sv.last_name AS "Supervisor"
FROM sales_representatives sr JOIN sales_representatives sv
ON sr.supervisor_id = sv.id;
```



```
SELECT sr.first_name || ' ' || sr.last_name AS "Rep",sv.first_name || ' ' || sv.last_name AS "Supervisor"
FROM sales_representatives sr JOIN sales_representatives sv
ON sr.supervisor_id = sv.id;
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | Query Result 5

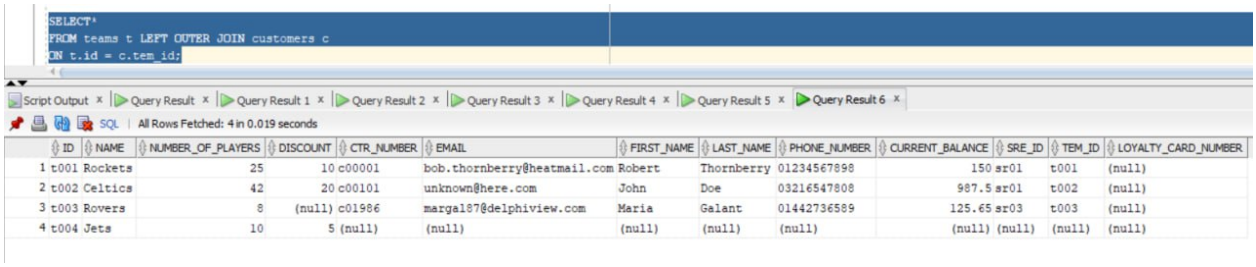
SQL | All Rows Fetched: 3 in 0.014 seconds

	Rep	Supervisor
1	Charles Raymond	Charles Raymond
2	Victoria Wright	Charles Raymond
3	Barry Speed	Charles Raymond

Part 2 : Use OUTER joins (S6L9 Objective 3)

1. Write a query that will display all of the team and customer information even if there is no match with the table on the left (team).

```
SELECT*
FROM teams t LEFT OUTER JOIN customers c
ON t.id = c.tem_id;
```



```
SELECT*
FROM teams t LEFT OUTER JOIN customers c
ON t.id = c.tem_id;
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | Query Result 5 | Query Result 6

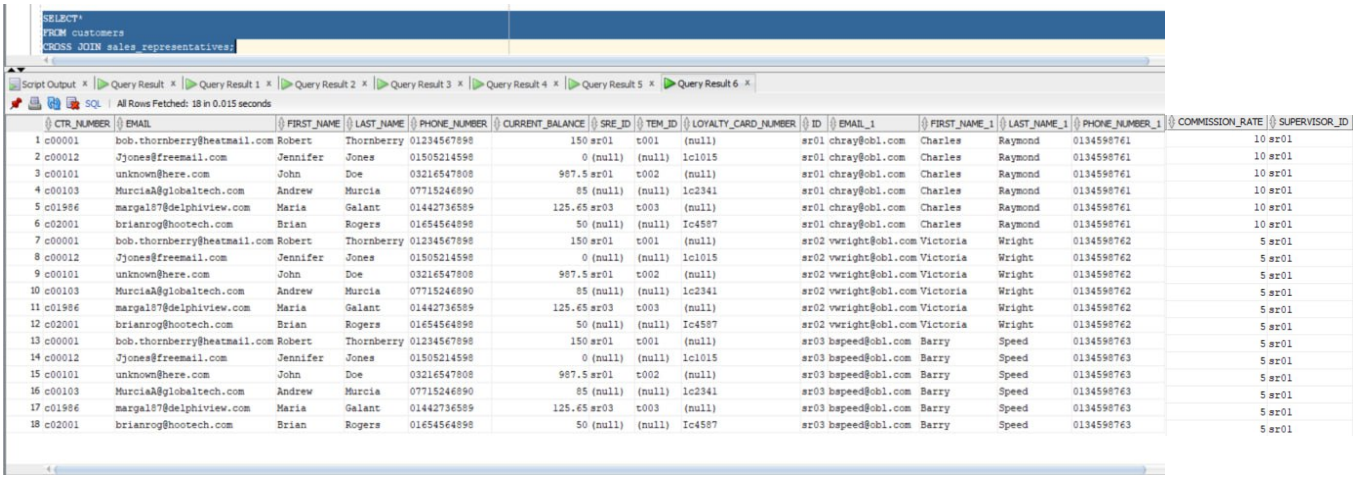
SQL | All Rows Fetched: 4 in 0.019 seconds

	ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT	CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
1	t001	Rockets	25	10	c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)
2	t002	Celtics	42	20	c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)
3	t003	Rovers	8	(null)	c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)
4	t004	Jets	10	5	(null)	(null)	(null)	(null)	(null)	(null)	(null)	(null)	(null)

Part 3 : Generating a Cartesian Product (S6L9 Objective 4)

1. Create a Cartesian product between the customer and sales representative tables

```
SELECT*
FROM customers
CROSS JOIN sales_representatives;
```



```
SELECT*
FROM customers
CROSS JOIN sales_representatives;
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | Query Result 5 | Query Result 6

SQL | All Rows Fetched: 18 in 0.015 seconds

	CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER	ID	EMAIL_1	FIRST_NAME_1	LAST_NAME_1	PHONE_NUMBER_1	COMMISSION_RATE	SUPERVISOR_ID
1	c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
2	c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	lc1015	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
3	c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
4	c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	lc2341	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
5	c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
6	c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	(null)	(null)	Ic4587	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
7	c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
8	c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	lc1015	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
9	c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
10	c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	lc2341	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
11	c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
12	c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	(null)	(null)	Ic4587	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
13	c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
14	c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	lc1015	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
15	c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
16	c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	lc2341	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
17	c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
18	c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	(null)	(null)	Ic4587	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01