

## Lab 4

Name: Leow Yan Hong

Matric No: A22EC0067

Course: Database SECD2533

Section: 06

## Section 6 lesson 9 Exercise 1: Joining Tables using JOIN

### SQL4-DML3 Part 1

1. SELECT \*

FROM sales\_representatives NATURAL JOIN sales\_rep\_addresses;

ID	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	COMMISSION_RATE	SUPERVISOR_ID	ADDRESS_LINE_1	ADDRESS_LINE_2	CITY	ZIP_CODE
sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01	12 Cherry Lane	Denton	Detroit	DT48211
sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01	87 Blossom Hill	Uptown	Detroit	DT52314
sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01	12 Junction Row	Skinflats	Detroit	DT52564

2. SELECT id, first\_name, last\_name, address\_line\_1, address\_line\_2, city, email, phone\_number  
FROM sales\_representatives NATURAL JOIN sales\_rep\_addresses;

ID	FIRST_NAME	LAST_NAME	ADDRESS_LINE_1	ADDRESS_LINE_2	CITY	EMAIL	PHONE_NUMBER
sr01	Charles	Raymond	12 Cherry Lane	Denton	Detroit	chray@obl.com	0134598761
sr02	Victoria	Wright	87 Blossom Hill	Uptown	Detroit	vwright@obl.com	0134598762
sr03	Barry	Speed	12 Junction Row	Skinflats	Detroit	bspeed@obl.com	0134598763

### Part 2

1. SELECT id, first\_name, last\_name, address\_line\_1, address\_line\_2, city, email, phone\_number  
FROM sales\_representatives JOIN sales\_rep\_addresses  
USING (id);

ID	FIRST_NAME	LAST_NAME	ADDRESS_LINE_1	ADDRESS_LINE_2	CITY	EMAIL	PHONE_NUMBER
sr01	Charles	Raymond	12 Cherry Lane	Denton	Detroit	chray@obl.com	0134598761
sr02	Victoria	Wright	87 Blossom Hill	Uptown	Detroit	vwright@obl.com	0134598762
sr03	Barry	Speed	12 Junction Row	Skinflats	Detroit	bspeed@obl.com	0134598763

2. SELECT \*

FROM items JOIN price\_history  
USING (itm-number);

ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ITM_ID	START_DATE	START_TIME	PRICE	END_DATE	END_TIME
im01101048	premium bat	high quality baseball bat	equipment	-	-	im010230128	13-Dec-2021	13-Dec-2021	99.99	-	-
im01101044	gloves	catcher mitt	clothing	brown	m	im010230124	17-Jun-2017	17-Jun-2016	4.99	-	-
im01101045	under shirt	top worn under the game top	clothing	white	s	im010230125	25-Nov-2016	25-Nov-2016	14.99	25-Jan-2017	25-Jan-2017
im01101045	under shirt	top worn under the game top	clothing	white	s	im010230125	25-Jan-2017	25-Jan-2017	8.99	25-Jan-2017	25-Jan-2017
im01101045	under shirt	top worn under the game top	clothing	white	s	im010230125	26-Jan-2017	26-Jan-2017	15.99	13-Dec-2021	13-Dec-2021
im01101046	socks	team socks with emblem	clothing	range	l	im010230126	12-Feb-2017	12-Feb-2017	7.99	-	-
im01101047	game top	team shirt with emblem	clothing	range	m	im010230127	25-Apr-2017	25-Apr-2017	24.99	-	-
im01101048	premium bat	high quality baseball bat	equipment	-	-	im010230128	31-May-2017	31-May-2017	149	-	-

### Part 3

1. SELECT c.ctr\_number, c.first\_name AS "CTR First-Name", c.last\_name AS "CTR Last-Name", c.phone\_number AS "CTR Phone-Number", c.email AS "CTR Email", s.id AS "SRE\_ID", s.first\_name AS "SRE First-Name", s.last\_name AS "SRE Last-Name", s.email AS "SRE Email"  
FROM customers c JOIN sales\_representatives s  
ON (c.sre = s.id);

## Part 4

```
1. SELECT c.ctr_number, c.first_name AS "CTR First Name", c.last_name AS "CTR Last Name", c.phone_number AS  
"CTR Phone Number", c.email AS "CTR Email", s.id AS "SRE_ID", s.first_name AS "SRE First Name", s.last_name  
AS "SRE Last Name", s.email AS "SRE Email", t.name AS "TEAM NAME"  
FROM customers c JOIN sales-representatives s  
ON (c.sre = s.id)  
JOIN teams t  
ON (c.team_id = t.id);
```

Results	Explain	Describe	Save SQL	History				
CTR_NUMBER	CTR First Name	CTR Last Name	CTR Phone Number	CTR Email	SRE_ID	SRE First Name	SRE Last Name	SRE Email
c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com
c00101	John	Doe	01216547808	unknown@here.com	sr01	Charles	Raymond	chray@obl.com
c0986	Maria	Galant	01442736589	margali7@ddolphinview.com	sr03	Barry	Speed	bspeed@obl.com

## Part 5

```
1. SELECT c.ctr_number, c.first_name AS "CTR First Name", c.last_name AS "CTR Last Name", c.phone_number AS  
"CTR Phone Number", c.email AS "CTR Email", s.id AS "SRE_ID", s.first_name AS "SRE First Name", s.last_name  
AS "SRE Last Name", s.email AS "SRE Email", t.name AS "TEAM NAME"  
FROM customers c JOIN sales-representatives s  
ON (c.sre = s.id);  
JOIN teams t  
ON (c.team_id = t.id)  
WHERE c.ctr_number = 'C0001';
```

CTR_NUMBER	CTR First Name	CTR Last Name	CTR Phone Number	CTR Email	SRE_ID	SRE First Name	SRE Last Name	SRE Email	Team Name
c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com	Rockets
c00101	John	Doe	01216547808	unknown@here.com	sr01	Charles	Raymond	chray@obl.com	Celtics
c0986	Maria	Galant	01442736589	margali7@ddolphinview.com	sr03	Barry	Speed	bspeed@obl.com	Rovers

## Part 6

```
1. SELECT 'The cost of the '||i.name||' on this day was '||p.price AS "Item Details"  
FROM items i JOIN price-history p  
ON i.item_number = 'im01101045';  
WHERE ('12/12/2016' BETWEEN p.startdate AND p.end_date);
```

### ITEM DETAILS

The cost of the under shirt on this day was 14.99

## SQL 4-DML3 Part 2

### Part 1

1. SELECT r.first\_name||' '||r.last\_name AS "Rep", s.first\_name||' '||s.last\_name AS "Supervisor"  
FROM sales\_representatives r JOIN sales\_representatives s  
ON (r.supervisor\_id = s.id);

Rep	Supervisor
Charles Raymond	Charles Raymond
Victoria Wright	Charles Raymond
Barry Speed	Charles Raymond

### Part 2

1. SELECT \*  
FROM teams t RIGHT OUTER JOIN customer c  
ON (t.id = c.team\_id);

ID	NAME	NUMBER OF PLAYERS	DISCOUNT	CTL NUMBER	EMAIL	FIRST NAME	LAST NAME	PHONE NUMBER	CURRENT BALANCE	SHE ID	TEAM ID	LOYALTY CARD NUMBER
-	-	-	-	c0001	brianp@hottmail.com	Brian	Rogers	1654564568	50	-	-	94587
1001	Rockets	25	10	c0001	bob.thomson@earthlink.net	Robert	Thomson	0123456789	150	u01	1001	-
-	-	-	-	c0012	jones@earthlink.net	Jennifer	Jones	0150214590	0	-	-	94015
1002	Celtics	42	20	c0011	johnson@earthlink.net	John	Doe	0321654789	987.5	u01	1002	-
-	-	-	-	u0103	hunch@globalnet.com	Andrew	Murphy	0773246690	40	-	-	92341
1003	Raptors	8	-	u0104	margaret@earthlink.net	Maria	Garrett	01442776589	125.65	u03	1003	-

### Part 3

1. SELECT \*  
FROM customers  
CROSS JOIN sales\_representatives;

CTL NUMBER	EMAIL	FIRST NAME	LAST NAME	PHONE NUMBER	CURRENT BALANCE	SHE ID	TEAM ID	LOYALTY CARD NUMBER	ID	EMAIL	FIRST NAME	LAST NAME	PHONE NUMBER	CURRENT BALANCE
c0001	brianp@hottmail.com	Brian	Rogers	1654564568	50	-	-	94587	u01	chey@earthlink.net	Charles	Raymond	0123456789	150
c0001	bob.thomson@earthlink.net	Robert	Thomson	0123456789	150	u01	1001	-	u01	chey@earthlink.net	Charles	Raymond	0123456789	150
c0012	jones@earthlink.net	Jennifer	Jones	0150214590	0	-	-	94015	u01	chey@earthlink.net	Charles	Raymond	0123456789	150
c0011	johnson@earthlink.net	John	Doe	0321654789	987.5	u01	1002	-	u01	chey@earthlink.net	Charles	Raymond	0123456789	150
u0103	hunch@globalnet.com	Andrew	Murphy	0773246690	40	-	-	92341	u01	chey@earthlink.net	Charles	Raymond	0123456789	150
u0104	margaret@earthlink.net	Maria	Garrett	01442776589	125.65	u03	1003	-	u01	chey@earthlink.net	Charles	Raymond	0123456789	150
c0001	brianp@hottmail.com	Brian	Rogers	1654564568	50	-	-	94587	u02	veer@earthlink.net	Victoria	Wright	0123456789	5
c0012	jones@earthlink.net	Jennifer	Jones	0150214590	0	-	-	94015	u02	veer@earthlink.net	Victoria	Wright	0123456789	5
c0011	johnson@earthlink.net	John	Doe	0321654789	987.5	u01	1002	-	u02	veer@earthlink.net	Victoria	Wright	0123456789	5
u0103	hunch@globalnet.com	Andrew	Murphy	0773246690	40	-	-	92341	u02	veer@earthlink.net	Victoria	Wright	0123456789	5
u0104	margaret@earthlink.net	Maria	Garrett	01442776589	125.65	u03	1003	-	u02	veer@earthlink.net	Victoria	Wright	0123456789	5
c0001	brianp@hottmail.com	Brian	Rogers	1654564568	50	-	-	94587	u03	speed@earthlink.net	Barry	Speed	0123456789	5
c0012	jones@earthlink.net	Jennifer	Jones	0150214590	0	u01	1001	-	u03	speed@earthlink.net	Barry	Speed	0123456789	5
c0011	johnson@earthlink.net	John	Doe	0321654789	987.5	u01	1002	-	u03	speed@earthlink.net	Barry	Speed	0123456789	5
u0103	hunch@globalnet.com	Andrew	Murphy	0773246690	40	-	-	92341	u03	speed@earthlink.net	Barry	Speed	0123456789	5
u0104	margaret@earthlink.net	Maria	Garrett	01442776589	125.65	u03	1003	-	u03	speed@earthlink.net	Barry	Speed	0123456789	5