

Lab 4

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Course Name : Database

Course Code : SECD2523

Section : 06

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Lesson 9 Exercise 1: Joining Tables Using Join

Part 1:

1) SELECT *

FROM sales_representatives NATURAL JOIN sales_rep_addresses;

```
240 SELECT *
241 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;

```
242 SELECT id, first_name, last_name, address_line_1, address_line_2, city, email, phone_number
243 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);

```
246 SELECT id, first_name, last_name, address_line_1, address_line_2, city, email, phone_number
247 FROM sales_representatives JOIN sales_rep_addresses
248 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);

```
249 SELECT *
250 FROM items JOIN price_history
251 USING (itm_number);
```

Results Explain Describe Saved SQL History

ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID	START_DATE	START_TIME	PRICE	END_DATE	END_TIME
im0101044	gloves	catcher mitt	clothing	brown	m	il010230124	06/17/2017	06/17/2016	4.99	-	-
im0101045	under shirt	top worn under the game top	clothing	white	s	il010230125	11/25/2016	11/25/2016	14.99	01/25/2017	01/25/2017
im0101045	under shirt	top worn under the game top	clothing	white	s	il010230125	01/25/2017	01/25/2017	8.99	01/25/2017	01/25/2017
im0101045	under shirt	top worn under the game top	clothing	white	s	il010230125	01/26/2017	01/26/2017	15.99	-	-
im0101046	socks	team socks with emblem	clothing	range	l	il010230126	02/12/2017	02/12/2017	7.99	-	-
im0101047	game top	team shirt with emblem	clothing	range	m	il010230127	04/25/2017	04/25/2017	24.99	-	-

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-id = s.id);

```
260 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",
261 s.id AS "SRE_ID", s.first_name AS "SRE First Name", s.last_name AS "SRE Last Name", s.email AS "SRE Email"
262 FROM customers c JOIN sales_representatives s
263 ON (c.sre_id = s.id);
```

Results Explain Describe Saved 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	03216547808	unknown@here.com	sr01	Charles	Raymond	chray@obl.com
c01986	Maria	Galant	01442736589	marga187@delphiview.com	sr03	Barry	Speed	bspeed@obl.com



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_id = s.id)
JOIN teams t
ON (c.tem_id = t.id);

```

```

266 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",
267 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"
268 FROM customers c JOIN sales_representatives s
269 ON (c.sre_id = s.id)
270 JOIN teams t
271 ON (c.tem_id = t.id);

```

Results Explain Describe Saved 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	Team Name
c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com	Rockets
c00101	John	Doe	03216547808	unknown@here.com	sr01	Charles	Raymond	chray@obl.com	Celtics
c01986	Maria	Galant	01442736589	margal87@delphiview.com	sr03	Barry	Speed	bspeed@obl.com	Rovers

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_id = s.id)
JOIN teams t
ON (c.tem_id = t.id);
WHERE c.ctr_number = 'c00001';

```

```

274 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",
275 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"
276 FROM customers c JOIN sales_representatives s
277 ON (c.sre_id = s.id)
278 JOIN teams t
279 ON (c.tem_id = t.id)
280 WHERE c.ctr_number = 'c00001';

```

Results Explain Describe Saved 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	Team Name
c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com	Rockets



Part 6:

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

```
283 SELECT 'The cost of the ' || i.name || ' on this day was ' || p.price AS "Item Information"
284 FROM items i JOIN price_history p
285 ON i.item_number = 'im01101045'
286 WHERE ('12/12/2016' BETWEEN p.start_date AND p.end_date);
287
```

Results Explain Describe Saved SQL History

Item Information

The cost of the under shirt on this day was 14.99

Lesson 9 Exercise 2: Joining Tables Using Join

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;

```
289 SELECT r.first_name || ' ' || r.last_name AS "Rep", s.first_name || ' ' || s.last_name AS "Supervisor"
290 FROM sales_representatives r JOIN sales_representatives s
291 ON r.supervisor_id = s.id;
```

Results Explain Describe Saved SQL History

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



Part 2:

1) SELECT *

FROM teams t RIGHT OUTER JOIN customers c
ON (t.id = c.tem_id);

```
294 SELECT *
295 FROM teams t RIGHT OUTER JOIN customers c
296 ON (t.id = c.tem_id);
```

Results Explain Describe Saved SQL History

ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT	CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUME
t001	Rockets	25	10	c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-
-	-	-	-	c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015
t002	Celtics	42	20	c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-
-	-	-	-	c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341
t003	Rovers	8	-	c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-
-	-	-	-	c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	-	-	lc4587

Part 3:

1) SELECT *

FROM customers
CROSS JOIN sales_representatives;

```
299 SELECT *
300 FROM customers
301 CROSS JOIN sales_representatives;
```

Results Explain Describe Saved SQL History

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER	ID	EMAIL	FIRST_NAME	LAST_N
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-	sr01	chray@obl.com	Charles	Raymon
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015	sr01	chray@obl.com	Charles	Raymon
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-	sr01	chray@obl.com	Charles	Raymon
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341	sr01	chray@obl.com	Charles	Raymon
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-	sr01	chray@obl.com	Charles	Raymon
c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	-	-	lc4587	sr01	chray@obl.com	Charles	Raymon
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-	sr02	vwright@obl.com	Victoria	Wright
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015	sr02	vwright@obl.com	Victoria	Wright
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-	sr02	vwright@obl.com	Victoria	Wright

