



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

**FACULTY OF COMPUTING**  
UTM Johor Bahru

**SESSION 2023/2024 SEMESTER 1**

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## **SECD2523 - DATABASE**

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### **Lab Exercise 4**

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**Section : 02**

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Lab 4

Port 1

- 1 SELECT \*  
FROM sales\_representatives NATURAL JOIN sales\_rep\_addresses;
- 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 USING (id);
- 3 SELECT id, first\_name, last\_name, address\_line\_1, address\_line\_2,  
city, email, phone\_number  
FROM sales\_representatives JOIN sales\_rep\_addresses
- 4 SELECT \*  
FROM items JOIN price\_history  
USING (~~id~~ item\_number);
- 5 SELECT c.cust\_number AS "Customer Number", c.first\_name AS  
"Customer First Name", c.last\_name AS "Customer Last Name", ~~id~~  
c.phone\_number AS "Customer phone number", c.email AS  
"Customer Email", s.id AS "Salesman ID", s.first\_name AS  
"~~id~~ Salesman First Name", s.last\_name AS "Salesman Last Name",  
s.email AS "Salesman Email"  
FROM customers c JOIN sales\_representatives s  
ON (c.sre\_id = s.id);
- 6 SELECT c.cust\_number AS "Customer Number", ~~id~~ c.first\_name AS  
"Customer First Name", c.last\_name AS "Customer Last Name",  
c.phone\_number AS "Customer phone number", c.email AS "Customer  
Email", s.id AS "Salesman ID", s.first\_name AS "Salesman First  
Name", s.last\_name AS "Salesman Last Name", s.email AS "Salesman  
Email", t.name AS "Team Name" FROM customers c JOIN ~~id~~  
sales\_representatives s ON (c.sre\_id = s.id)  
JOIN teams t  
ON (c.team\_id = t.id);



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```
SELECT c.ctr_number AS "Customer Number", c.first_name AS  
"Customer First Name", c.last_name AS "Customer Last Name",  
c.phone_number AS "Customer Phone Number", c.email AS "Customer  
Email", s.id AS "Salesman ID", s.first_name AS "Salesman First Name",  
s.last_name AS "Salesman Last Name", s.email AS "Salesman 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';
```

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```
SELECT 'The cost of the ' || i.name || ' on this day was ' || p.price  
AS "Price Details"  
FROM items i JOIN price_history p  
ON i.item_number = p.item_number  
WHERE item_number = 'I00010045'  
AND TO_DATE ('12-Dec-2016', 'DD-Mon-YYYY') BETWEEN p.start_date AND  
p.end_date;
```

Part 2

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

2 SELECT \*  
FROM teams LEFT OUTER JOIN customers  
ON (cid = tem\_id);

3 SELECT \*  
FROM customers  
CROSS JOIN sales\_representatives



# LAB 4

## Part 1:

### 1.0

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

### 2.0

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

### 3.0

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

### 4.0

ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID	START_DATE	START_TIME	PRICE	END_DATE	END_TIME
1	im01101044	gloves	catcher mitt	clothing	brown	m	i1010230124	17-JUN-17	17-JUN-16	4.99	(null)
2	im01101045	under shirt	top worn under the game top	clothing	white	s	i1010230125	25-NOV-16	25-NOV-16	14.99	25-JAN-17
3	im01101045	under shirt	top worn under the game top	clothing	white	s	i1010230125	25-JAN-17	25-JAN-17	8.99	25-JAN-17
4	im01101045	under shirt	top worn under the game top	clothing	white	s	i1010230125	26-JAN-17	26-JAN-17	15.99	(null)
5	im01101046	socks	team socks with emblem	clothing	range	l	i1010230126	12-FEB-17	12-FEB-17	7.99	(null)
6	im01101047	game top	team shirt with emblem	clothing	range	m	i1010230127	25-APR-17	25-APR-17	24.99	(null)
7	im01101048	premium bat	high quaity basball bat	equipment	(null)	(null)	i1010230128	31-MAY-17	31-MAY-17	149	09-NOV-23
8	im01101048	premium bat	high quaity basball bat	equipment	(null)	(null)	i1010230128	09-NOV-23	09-NOV-23	99.99	09-NOV-23

5.0

	Customer number	Custoemr First Name	Customer Last Name	Customer Phone Number	Customer Emsil	Salesman ID	Salesman First Name	Salesman Last Name	Salesman Email	
1	c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com	
2	c00101	John	Doe	03216547808	unknown@here.com	sr01	Charles	Raymond	chray@obl.com	
3	c01986	Maria	Galant	01442736589	margal87@delphiview.com	sr03	Barry	Speed	bspeed@obl.com	

6.0

	Customer number	Custoemr First Name	Customer Last Name	Customer Phone Number	Customer Emsil	Salesman ID	Salesman First Name	Salesman Last Name	Salesman Email	Team Name
1	c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com	Rockets
2	c00101	John	Doe	03216547808	unknown@here.com	sr01	Charles	Raymond	chray@obl.com	Celtics
3	c01986	Maria	Galant	01442736589	margal87@delphiview.com	sr03	Barry	Speed	bspeed@obl.com	Rovers

7.0

	Customer number	Custoemr First Name	Customer Last Name	Customer Phone Number	Customer Emsil	Salesman ID	Salesman First Name	Salesman Last Name	Salesman Email	Team Name
1	c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com	Rockets

8.0

	Price Details
1	The cost of the under shirt on this day was 14.99

## Part 2 :

### 1.0

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

### 2.0

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)

### 3.0

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
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)		sr01 chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	1c1015		sr01 chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)		sr01 chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	1c2341		sr01 chray@obl.com	Charles	Raymond	0134598761	10	sr01
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)		sr01 chray@obl.com	Charles	Raymond	0134598761	10	sr01
c02001	brianrog@hootech.com	Brian	ROGERS	01654564898	50	(null)	(null)	1c4587		sr01 chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)		sr02 vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	1c1015		sr02 vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)		sr02 vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	1c2341		sr02 vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)		sr02 vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c02001	brianrog@hootech.com	Brian	ROGERS	01654564898	50	(null)	(null)	1c4587		sr02 vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)		sr03 bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	1c1015		sr03 bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)		sr03 bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	1c2341		sr03 bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)		sr03 bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c02001	brianrog@hootech.com	Brian	ROGERS	01654564898	50	(null)	(null)	1c4587		sr03 bspeed@obl.com	Barry	Speed	0134598763	5	sr01