DML 3 - PART1

Exercise 1

PART 1

1. SELECT * FROM customers NATULAL JOIN sales_rep_addresses;

SQL Worksheet

Clear | Find | Actions ⌄ | Save | **Run** ▶

```sql
1  SELECT *FROM sales_representatives NATURAL JOIN sales_rep_addresses;
2
3
```

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

```sql
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;
```

SQL Worksheet

```
1 ⌄   SELECT id, first_name, last_name, address_line_1, address_line_2, city, email, phone_Number
2     FROM sales_representatives NATURAL JOIN sales_rep_addresses;
3
```

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_line2, city, email, phone_number
   FROM   sales_representatives INNER JOIN sales_rep_addresses
   USING (id);
```

SQL Worksheet

```sql
1 ∨  SELECT id, first_name, last_name, address_line_1, address_line_2, city, email, phone_number
2      FROM sales_representatives JOIN sales_rep_addresses
3      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

Download CSV

```
b. SELECT * FROM items JOIN price_history
   USING (itm_number);
```

SQL Worksheet

Clear   Find   Actions   Save   Run

```sql
Select * FROM items JOIN price_history
  USING (itm_number);
```

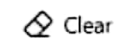| ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID	START_DATE	START_TIME	PRICE	END_DATE	END_TIME
im01101044	gloves	catcher mitt	clothing	brown	m	il010230124	17-JUN-17	17-JUN-16	4.99	-	-
im01101045	under shirt	top worn under the game top	clothing	white	s	il010230125	25-NOV-16	25-NOV-16	14.99	25-JAN-17	25-JAN-17
im01101045	under shirt	top worn under the game top	clothing	white	s	il010230125	25-JAN-17	25-JAN-17	8.99	25-JAN-17	25-JAN-17
im01101045	under shirt	top worn under the game top	clothing	white	s	il010230125	26-JAN-17	26-JAN-17	15.99	-	-
im01101046	socks	team socks with emblem	clothing	range	l	il010230126	12-FEB-17	12-FEB-17	7.99	-	-
im01101047	game top	team shirt with emblem	clothing	range	m	il010230127	25-APR-17	25-APR-17	24.99	-	-

PART 3

1. SELECT   c.ctr_number "Customer Number", c-first name "Custmer First Name",
   c.last_name "Customer Last Name", c phone_number "Customer Phone Number",
   c-email "Customer Email", s-id "Sale ID", s first_name "Sale First Name"
   s-last_name "Sale Last Name", c email "Sate Email"
   FROM customers c   JOIN   sales_represantatives s
   ON Cc.sre_id = s.id);

```sql
SELECT c.ctr_number "Customer Number", c.first_name "Customer First Name",
    c.last_name "Customer Last Name", c.phone_number "Customer Phone Number",
    c.email "Customer Email", s.id "Sale ID", s.first_name "Sale First Name", s.last_name "Sale Last Name",
    s.email "Sale Email"
FROM customers c JOIN sales_representatives s
ON (c.sre_id = s.id);
```

Customer Number	Customer First Name	Customer Last Name	Customer Phone Number	Customer Email	Sale ID	Sale First Name	Sale Last Name	Sale 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	margal87@delphiview.com	sr03	Barry	Speed	bspeed@obl.com

PART 3

1. SELECT   c.ctr_number "Customer Number", c.first_name "Customer First Name",
   c.last_name "Customer Last Name", c.phone_number "Customer Phone Number",
   c.email "Customer Email", s.id "Sale ID", s.first_name "Sale First Name",
   s.last_name "Sale Last Name", s.email "Sale Email", t.name "Cust Team Nam
   FROM   customers c   JOIN   sales_representatives s
   ON (c.sre_id = s.id);
   JOIN teams t
   ON (c.team_id = t.id);
   WHERE   c.ctr_number = 'C00001';

PART 3

```sql
SELECT c.ctr_number "Customer Number", c.first_name "Customer First Name",
  c.last_name "Customer Last Name", c.phone_number "Customer Phone Number",
  c.email "Customer Email",
  s.id "Sale Rep ID", s.first_name "Sale Rep First Name", s.last_name "Sale Rep Last Name",
  s.email "Sale Rep Email",
  t.name "Customer Team Name"
  FROM customers c JOIN sales_representatives s
  ON (c.sre_id = s.id)
```

Customer Number	Customer First Name	Customer Last Name	Customer Phone Number	Customer Email	Sale Rep ID	Sale Rep First Name	Sale Rep Last Name	Sale Rep Email	Customer 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

```sql
PART 6

SELECT 'The cost of the ' || a.name || 'on 12-Dee-2016 was' || b.price AS
    "Part 6"
FROM   items a
JOIN   price history b ON a.itm_number = b.itm_number
WHERE  a.itm_number = 'imo110104s'
AND    TO_DATE ('12-Dee-2016', 'DD-Mon-YYYY') BETWEEN b.start_date AND
       b.end_date'
```

SQL Worksheet

```
1 ⌄  SELECT 'The cost of the ' || a.name || ' on 12-Dec-2016 was ' || b.price AS "Part 6"
2    FROM items a
3    JOIN price_history b ON a.itm_number = b.itm_number
4    WHERE a.itm_number = 'im01101045'
5    AND TO_DATE('12-Dec-2016', 'DD-Mon-YYYY') BETWEEN b.start_date AND b.end_date;
```

▲

Part 6

The cost of the under shirt on 12-Dec-2016 was 14.99

Exercise 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.id = s.supervisor_id);

```sql
1 ∨ SELECT x.first_name || ' ' || x.last_name AS Rep, s.first_name || ' ' || s.last_name AS supervisor
2   From sales_representatives x JOIN sales_representatives s
3   ON (x.supervisor_id = s.id);
```

▲

REP	SUPERVISOR
Charles Raymond	Charles Raymond
Victoria Wright	Charles Raymond
Barry Speed	Charles Raymond

Part 2

" SELECT * FROM teams t LEFT OUTER JON customers c

ON (t.id = c.tem_id);

Clear   Find   Actions ⌄   Save   Run ▶

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

ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT	CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	T
t001	Rockets	25	10	c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t
t002	Celtics	42	20	c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t
t003	Rovers	8	-	c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t

Part 3

2. SELECT * FROM customers
CROSS JOIN sales_representatives;

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