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Database Lab 4   A22EC0072

Part 1

A . 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;

B . 1. select * from sales_representatives join sales_rep_addresses
       using (id);

      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);

   2. select * from items join price_history
      using (item_number);

C. select
     ctms.ctr_number   "Customer Number",
     ctms.first_name   "Customer First Name",
     ctms.last_name   "Customer Last Name",
     ctms.phone_number   "Customer Phone Number",
     ctms.email   "Customer Email",
     s_rep.id   "Sales Representative ID",
     s_rep.first_name   "Sales Representative First Name",
     s_rep.last_name   "Sales Representative Last Name",
     s_rep.email   "Sales Representative Email"
   from customers ctms join sales_representatives s_rep
   on (ctms.sre_id = s_rep.id);

D. select
    ctms. ctr_number   "Customer Number",
    ctms. first_name   "Customer First Name",
    ctms. last_name   "Customer Last Name",
    ctms. phone_number "Customer Phone Number",
    ctms. email   "Customer Email",
    s_rep. id   "Sales Representative ID",
    s_rep. first_name   "Sales Representative First Name",
    s_rep. last_name   "Sales Representative Last Name",
    s_rep. email   "Sales Representative Email",
    t. name   "Team Name",
    from customers ctms join sales_representatives s_rep
    on (ctms . sre_id = s_rep.id)
    join teams t
    on (ctms . tem_id = t. id) ;

E. // code same with D but add

        where   ctms. ctr_number = 'c00001' ;

F. select
        'The cost of the ' || itm. name || ' on this day was ' || h . price
        as "Price of Items"
        from items itm join inventory_list inv_l
        on (itm. ilt_id = inv_l. id)
        join price_history h
        on (itm. itm_number = h . itm_number)
        where
            itm. itm_number = 'im01101045' and
            h. start_date < '12 - Dec -16' and
            h. end_date > '12 - Dec - 16' ;

Part 2

A.   select
       r. first_name || ' ' || r. last_name   as   "Sales Representative",
       s. first_name || ' ' || s. last_name   as   "Supervisor"
       from sales_representatives   r   join   sales_representatives s
       on (r. supervisor_id = s.id) ;

B.   select *
       from teams t   left outer join customers ctms
       on (t. id = ctms. tem_id) ;

C.   select *
       from customers , sales_representatives ;

Appendix

Part 1

Part 1

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.

```
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;
```

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.

```
1   select * from sales_representatives join sales_rep_addresses
2       using(id);
```

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

```
4   select id, first_name, last_name, address_line_1, address_line_2, city, email, phone_number
5       from sales_representatives join sales_rep_addresses
6       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.

```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	-	-
im01101048	premium bat	high quaity basball bat	equipment	-	-	il010230128	31-MAY-17	31-MAY-17	149	27-DEC-23	27-DEC-23
im01101048	premium bat	high quaity basball bat	equipment	-	-	il010230128	27-DEC-23	27-DEC-23	99.99	-	-

Part 3

```sql
select
    ctms.ctr_number "Customer Number",
    ctms.first_name "Customer First Name",
    ctms.last_name "Customer Last Name",
    ctms.phone_number "Customer Phone Number",
    ctms.email "Customer Email",
    s_rep.id "Sales Representative ID",
    s_rep.first_name "Sales Representative First Name",
    s_rep.last_name "Sales Representative Last Name",
    s_rep.email "Sales Representative Email"
    from customers ctms join sales_representatives s_rep
    on (ctms.sre_id = s_rep.id);
```

Customer Number	Customer First Name	Customer Last Name	Customer Phone Number	Customer Email	Sales Representative ID	Sales Representative First Name	Sales Representative Last Name	Sales Representative 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 4

```sql
1  select
2      ctms.ctr_number "Customer Number",
3      ctms.first_name "Customer First Name",
4      ctms.last_name "Customer Last Name",
5      ctms.phone_number "Customer Phone Number",
6      ctms.email "Customer Email",
7      s_rep.id "Sales Representative ID",
8      s_rep.first_name "Sales Representative First Name",
9      s_rep.last_name "Sales Representative Last Name",
10     s_rep.email "Sales Representative Email",
11     t.name "Team Name"
12     from customers ctms join sales_representatives s_rep
13     on (ctms.sre_id = s_rep.id)
14     join teams t
15     on (ctms.tem_id = t.id);
```

Customer Number	Customer First Name	Customer Last Name	Customer Phone Number	Customer Email	Sales Representative ID	Sales Representative First Name	Sales Representative Last Name	Sales Representative 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	marga187@delphiview.com	sr03	Barry	Speed	bspeed@obl.com	Rovers

Part 5

```sql
1  select
2      ctms.ctr_number "Customer Number",
3      ctms.first_name "Customer First Name",
4      ctms.last_name "Customer Last Name",
5      ctms.phone_number "Customer Phone Number",
6      ctms.email "Customer Email",
7      s_rep.id "Sales Representative ID",
8      s_rep.first_name "Sales Representative First Name",
9      s_rep.last_name "Sales Representative Last Name",
10     s_rep.email "Sales Representative Email",
11     t.name "Team Name"
12     from customers ctms join sales_representatives s_rep
13     on (ctms.sre_id = s_rep.id)
14     join teams t
15     on (ctms.tem_id = t.id)
16     where ctms.ctr_number = 'c00001';
```

Customer Number	Customer First Name	Customer Last Name	Customer Phone Number	Customer Email	Sales Representative ID	Sales Representative First Name	Sales Representative Last Name	Sales Representative Email	Team Name
c00001	Robert	Thornberry	01234567898	bob.thornberry@heatmail.com	sr01	Charles	Raymond	chray@obl.com	Rockets

Part 6

```
1   select
2       'The cost of the ' || itm.name || ' on this day was ' || h.price as "Price of Items"
3       from items itm join inventory_list inv_l
4       on (itm.ilt_id = inv_l.id)
5       join price_history h
6       on (itm.itm_number = h.itm_number)
7       where
8           itm.itm_number = 'im01101045' and
9           h.start_date < '12-Dec-16' and
10          h.end_date > '12-Dec-16';
```

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

Part 2

Part 1

```
1   select
2       r.first_name || ' ' || r.last_name as "Sales Representative",
3       s.first_name || ' ' || s.last_name as "Supervisor"
4       from sales_representatives r join sales_representatives s
5       on (r.supervisor_id = s.id);
```

Sales Representative	Supervisor
Charles Raymond	Charles Raymond
Victoria Wright	Charles Raymond
Barry Speed	Charles Raymond

Part 2

```
1 v  select *
2        from teams t left outer join customers ctms
3        on (t.id = ctms.tem_id);
```

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

Part 3

```
1 v  select *
2        from customers, sales_representatives;
```

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER	ID	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	COMMISSION_RATE	SUPERVISOR_ID
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
c02001	brianrog@hootech.com	Brain	Rogers	01654564898	50	-	-	lc4587	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c02001	brianrog@hootech.com	Brain	Rogers	01654564898	50	-	-	lc4587	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c02001	brianrog@hootech.com	Brain	Rogers	01654564898	50	-	-	lc4587	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01
c02001	brianrog@hootech.com	Brain	Rogers	01654564898	50	-	-	lc4587	sr03	bspeed@obl.com	Barry	Speed	0134598763	5	sr01