

LAB 4

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EXERCISE 1

PART 1

1. Display all of the information about sales representatives and their addresses using a natural join.

```
SELECT *  
FROM sales_representatives NATURAL JOIN sales_rep_addresses;
```

2. Adapt the query from the previous question to only show the id, first name, last name, address line 1, address line 2, city, email and phone_number for the sales representatives.

```
SELECT id, first_name, last_name, address_line_1, address_line_2, city, email,  
phone_number  
FROM sales_representatives NATURAL JOIN sales_rep_addresses;
```

PART 2

1. Adapt the previous query answer to use the USING clause instead of a natural join.

```
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. Display all of the information about items and their price history by joining the items and price_history tables.

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

PART 3

```
SELECT ctr_number, c.first_name, c.last_name,  
c.phone_number,c.email,s.id,s.first_name,S.last_name,s.email
```

```
FROM customers c JOIN teams t
```

```
ON (t.id = c.team.id);
```

PART 4

```
SELECT ctr_number, c.first_name, c.last_name, c.phone_number,  
c.email,s.id,s.first_name,s.last_name,s.email, t.name "Team Name"
```

```
FROM customers c JOIN sales_representative s
```

```
ON (s.id = c.sre_id)
```

```
JOIN teams t
```

```
ON (t.id = c.tem_id);
```

PART 5

Using the answer to Task 4 add an additional condition to only show the results for the customer that has the number - c00001.

```
SELECT ctr_number, c.first_name, c.last_name, c.phone_number,  
c.email,s.id,s.first_name, s.last_name,s.email, t.name "Team Name"
```

```
FROM customers c JOIN sales_representative s
```

```
ON (s.id = c.sre_id)
```

```
JOIN teams t
```

```
ON (t.id = c.tem_id);
```

```
WHERE c.ctr_number = 'c00001';
```

PART 6

Write a query that will display name and cost of the item with the number im01101045 on the 12th of December 2016. The output of the query should look like this: The cost of the under shirt on this day was 14.99

```
SELECT 'The cost of the ' || i.name || 'on this day was' || p.price AS "Item Details"

FROM items i JOIN price_history p

ON ('12-Dec-2016' BETWEEN p.start_date AND p.end_date) AND (i.item_number =
'im01101045');

FROM customers CROSS JOIN sales_representatives;
```

EXERCISE 2

PART 1

1. Write a query that will display who the supervisor is for each of the sales representatives. The information should be displayed in two columns, the first column will be the first name and last name of the sales representative and the second will be the first name and last name of the supervisor. The column aliases should be Rep and Supervisor.

```
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);
```

PART 2

1. Write a query that will display all of the team and customer information even if there is no match with the table on the left (team).

```
SELECT *  
FROM teams t RIGHT OUTER JOIN customers c  
ON (t.id = c.team_id);
```

PART 3

1. Create a Cartesian product between the customer and sales representative tables

```
SELECT *  
FROM customers CROSS JOIN sales_representatives;
```