AERON GOH MING LUN No. Date

Lab 4 Exercise 1

Part 1: Creating Natural Joins

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;

Part 2: Creating Joins with the USING Clause

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 (itm_number);

Part 3: Creating Joins with the ON clause

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 "Sales Rep ID", s.first_name "Sales Rep First Name", s.lastname "Sales Rep Last Name", s.email "Sales Rep Email"
FROM customers c JOIN sales_representatives s
ON (c.sre_id = s.id);

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Part 4

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 "Sales Rep ID", s.first_name "Sales Rep First Name", s.last_name "Sales Rep Last Name", s.email "Sales Rep Email", t.name "Team Name"
FROM customers c JOIN sales_representatives s
ON (c.sre_id = s.id)
JOIN team t
ON (c.tem_id = t.id);

Part 5

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 "Sales Rep ID", s.first_name "Sales Rep First Name", s.last_name "Sales Rep Last Name", s.email "Sales Rep Email", t.name "Team Name"
FROM customers c JOIN sales_representatives s
ON (c.sre_id = s.id)
JOIN team t
ON (c.tem_id = t.id)
WHERE c.ctr_number = 'C0001';

Part 6 : Retrieving Records with Nonequijoins

1. SELECT 'The cost of the' || i.name || 'on this day was' || h.price
FROM items i JOIN inventory_list l
ON (i.ilt_id = l.id)
JOIN price_history h
ON (i.itm_number = h.itm_number)
WHERE i.itm_number = 'im01101045' AND h.start_date < 'Dec-12-2016' AND h.end_date > 'Dec-12-2016';

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Exercise 2

Part 1

```
1. SELECT r.first_name || ' ' || r.last_name "Rep", s.first_name || ' ' || s.last_name "Supervisor"
   FROM sales_representatives r JOIN sales_representatives s
   ON (r.supervisor_id = s.id);
```

Part 2

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

Part 3

```
1. SELECT *
   FROM customers c, sales_representatives r;
```