

## Assignment 5

Query 1: Find the business name of all contractors who have worked 10 or more hours for a customer in the 95819 area code.

```
SELECT bus_name
FROM CUSTOMER, HIRE
WHERE CUSTOMER.cust_id = HIRE.cust_id AND hours >= 10 AND zip = 95819;
```

```
mysql> SELECT bus_name
-> FROM CUSTOMER, HIRE
-> WHERE CUSTOMER.cust_id = HIRE.cust_id AND hours >= 10 AND zip = 95819;
+-----+
| bus_name |
+-----+
| McPaints |
+-----+
1 row in set (0.00 sec)
```

Query 2: Find the manufacturer id, color id, and names of all paint colors that have not been used in a room.

```
SELECT PAINT_COLOR.mfg_id, PAINT_COLOR.color_id, PAINT_COLOR.name
FROM PAINT_COLOR
WHERE PAINT_COLOR.color_id NOT IN (SELECT color_id FROM PAINTED);
```

```
mysql> SELECT PAINT_COLOR.mfg_id, PAINT_COLOR.color_id, PAINT_COLOR.name
-> FROM PAINT_COLOR
-> WHERE PAINT_COLOR.color_id NOT IN (SELECT color_id FROM PAINTED);
+-----+-----+-----+
| mfg_id | color_id | name      |
+-----+-----+-----+
| 985    | 335      | Invisible |
| 987    | 333      | Blueish   |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Query 3: Find the customer ID and first and last names of all customers who have used a paint color named "Blushing Pink" in a room named "Bedroom 1".

```
SELECT CUSTOMER.cust_id, CUSTOMER.first, CUSTOMER.last
FROM CUSTOMER, PAINTED, ROOM, PAINT_COLOR
WHERE CUSTOMER.cust_id = ROOM.cust_id
AND CUSTOMER.cust_id = PAINTED.cust_id
AND PAINTED.rm_name = ROOM.name
AND PAINT_COLOR.color_id = PAINTED.color_id
AND PAINT_COLOR.name = 'Blushing Pink'
AND ROOM.name = 'Bedroom 1';
```

```
mysql> SELECT CUSTOMER.cust_id, CUSTOMER.first, CUSTOMER.last
-> FROM CUSTOMER, PAINTED, ROOM, PAINT_COLOR
-> WHERE CUSTOMER.cust_id = ROOM.cust_id
-> AND CUSTOMER.cust_id = PAINTED.cust_id
-> AND PAINTED.rm_name = ROOM.name
-> AND PAINT_COLOR.color_id = PAINTED.color_id
-> AND PAINT_COLOR.name = 'Blushing Pink'
-> AND ROOM.name = 'Bedroom 1';
+-----+-----+-----+
| cust_id | first | last |
+-----+-----+-----+
| 601 | ryan | kozak |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql> █
```

Query 4: Find the customer ID and first and last names of all customers who have used a paint color named "Blushing Pink" but have used that color in some room other than "Bedroom 1". Make sure when you populate your database that this query returns at least some different results than query 3.

```
SELECT CUSTOMER.cust_id, CUSTOMER.first, CUSTOMER.last
FROM CUSTOMER, PAINTED, ROOM, PAINT_COLOR
WHERE CUSTOMER.cust_id = ROOM.cust_id
AND CUSTOMER.cust_id = PAINTED.cust_id
AND PAINTED.rm_name = ROOM.name
AND PAINT_COLOR.color_id = PAINTED.color_id
AND PAINT_COLOR.name = 'Blushing Pink'
AND ROOM.name <> 'Bedroom 1';
```

```
mysql> SELECT CUSTOMER.cust_id, CUSTOMER.first, CUSTOMER.last
-> FROM CUSTOMER, PAINTED, ROOM, PAINT_COLOR
-> WHERE CUSTOMER.cust_id = ROOM.cust_id
-> AND CUSTOMER.cust_id = PAINTED.cust_id
-> AND PAINTED.rm_name = ROOM.name
-> AND PAINT_COLOR.color_id = PAINTED.color_id
-> AND PAINT_COLOR.name = 'Blushing Pink'
-> AND ROOM.name <> 'Bedroom 1';
+-----+-----+-----+
| cust_id | first | last   |
+-----+-----+-----+
| 602     | jack  | bananas |
| 602     | jack  | bananas |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

Query 5: For each contractor, find the business name, discount, and total hours they have worked. Sort the output from most hours to least.

```
SELECT CONTRACTOR.bus_name, CONTRACTOR.discount, SUM(HIRE.hours) AS TotalHours
FROM CONTRACTOR, HIRE
WHERE CONTRACTOR.bus_name = HIRE.bus_name
GROUP BY CONTRACTOR.bus_name
ORDER BY TotalHours DESC;
```

```
mysql> SELECT CONTRACTOR.bus_name, CONTRACTOR.discount, SUM(HIRE.hours) AS TotalHours
FROM CONTRACTOR, HIRE
WHERE CONTRACTOR.bus_name = HIRE.bus_name
GROUP BY CONTRACTOR.bus_name
ORDER BY TotalHours DESC;
+-----+-----+-----+
| bus_name | discount | TotalHours |
+-----+-----+-----+
| McPaints | 50 | 60 |
| JB Paints | 25 | 20 |
+-----+-----+-----+
2 rows in set (0.01 sec)
```

Query 6: Find the customers with two or more rooms painted. For each customer, list their first and last name and the number of rooms painted, and have the output call this column 'Room Count'. Be sure to populate the database so that there are at least two different customers returned by this query.

```
SELECT CUSTOMER.first, CUSTOMER.last, COUNT(PAINTED.cust_id) AS 'Room Count'
FROM CUSTOMER, PAINTED
WHERE CUSTOMER.cust_id = PAINTED.cust_id
GROUP BY CUSTOMER.cust_id
HAVING COUNT(*) >= 2;
```

```
mysql> SELECT CUSTOMER.first, CUSTOMER.last, COUNT(PAINTED.cust_id) AS 'Room Count'
FROM CUSTOMER, PAINTED
WHERE CUSTOMER.cust_id = PAINTED.cust_id
GROUP BY CUSTOMER.cust_id
HAVING COUNT(*) >= 2;
+-----+-----+-----+
| first | last | Room Count |
+-----+-----+-----+
| ryan | kozak | 2 |
| jack | bananas | 2 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```