

Queries

/* 1

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

*/

```
select c.bus_name
from CONTRACTOR as c, CUSTOMER as cu, HIRE as h
WHERE c.bus_name = h.bus_name and h.hours > 10
      and h.cust_id = cu.cust_id and cu.zip = 95819;
```

```
+-----+
| bus_name |
+-----+
| company2 |
+-----+
1 row in set (0.00 sec)
```

/* 2

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

*/

```
select c.mfg_id, c.color_id, c.name
from PAINT_COLOR as c
where not exists (
  select p.mfg_id, p.color_id
  from PAINTED as p
  where p.mfg_id = c.mfg_id
        and p.color_id = c.color_id);
```

```
+-----+-----+-----+
| mfg_id | color_id | name   |
+-----+-----+-----+
|      4 |      10 | Orange |
|     32 |       4 | Yellow |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

/* 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 distinct c.cust_id, c.first, c.last
from CUSTOMER as c
where c.cust_id in
  (select p.cust_id
   from PAINTED as p, PAINT_COLOR as pc
   where pc.name = 'Blushing Pink' and p.rm_name = 'Bedroom 1')
```

and pc.mfg_id = p.mfg_id and pc.color_id = p.color_id);

cust_id	first	last
1235	Bob	Smith

1 row in set (0.00 sec)

/* 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 distinct c.cust_id, c.first, c.last
from CUSTOMER as c, PAINTED as p, PAINT_COLOR as pc
where c.cust_id = p.cust_id and pc.mfg_id = p.mfg_id
and pc.color_id = p.color_id and pc.name = "Blushing Pink"
and rm_name <> "Bedroom 1";
```

cust_id	first	last
1234	Warren	Quattrocchi
1236	Hank	Hill

2 rows in set (0.00 sec)

/* 5

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

*/

```
select distinct c.bus_name, c.discount, SUM(h.hours) as total_hours
from CONTRACTOR as c
join HIRE as h
on c.bus_name = h.bus_name
group by c.bus_name
order by total_hours desc;
```

bus_name	discount	total_hours
company2	0	15
company1	5	5

2 rows in set (0.00 sec)

/* 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 c.first, c.last, COUNT(rm_name) as "Room Count"
from CUSTOMER as c, PAINTED as p
where p.cust_id = c.cust_id
group by c.cust_id
having COUNT(rm_name) >= 2;
```

```
+-----+-----+
| first | last      | Room Count |
+-----+-----+
| Warren | Quattrocchi | 2 |
| Hank  | Hill        | 2 |
+-----+-----+
2 rows in set (0.00 sec)
```