

More SQL practice – Stephen’s solutions

Write queries against the Ben & Jerry’s SQLite database to answer the following questions:

1. How many cartons have been ordered of Chunky Monkey?

```
select cartonsOrdered from recipe where name='Chunky Monkey';
```

2. How small is our smallest freezer?

```
select min(capacity) as smallest_size from freezer;
```

3. Which recipe has the most outstanding orders?

```
select name from recipe order by cartonsOrdered desc limit 1;
```

4. How many freezers do we have that are not currently completely full?

```
select count(*) as num_non_full from freezer where load < capacity;
```

5. Our supplier of vanilla, banana, and mint ice cream isn’t responding to phone calls, and we suspect they have been destroyed by Hurricane Helene. How many ordered cartons are in jeopardy?

```
select sum(cartonsOrdered) as cartons_in_jeopardy from recipe
  where flavorName in ('vanilla','mint','banana');
```

6. How many recipe names do we have that are multiple words?

```
select count(*) as num_with_multiple_words from recipe where name like '% %';
```

7. How many recipes do we have based on each flavor of ice cream?

```
select flavorName, count(*) as num_recipes from recipe group by flavorName;
```

8. How many assembly lines do we have that don't permit mixins?

```
select count(*) as num_basic_assembly_lines
from assemblyLine where mixins='no';
```

9. Of all our assembly lines currently producing chocolate-based recipes, how fast is the fastest one?

```
select max(capacity) as fastest_choc from assemblyLine, recipe
where where recipe=name and flavorName='chocolate';
```

10. Which assembly line *is* that fastest chocolate-producing one from question 9, anyway?

```
with choc_ALs as
  (select id, capacity from assemblyLine, recipe
   where assemblyLine.recipe = recipe.name
   and flavorName='chocolate')
select id as fastest_choc_AL from choc_ALs
where capacity=(select max(capacity) from choc_ALs);
```

11. Here's a weird question I'll bet you've never thought about: what's the average cost of mixins whose names contain the string "ies"?

```
select avg(costPerOz) as weird_question from mixin where name like '%ies%';
```

12. Some people think banana and mint are pretty exotic flavors for ice cream, and that not just any ol' mixin would taste good in them. What are all the mixins currently used in banana-based and/or mint-based recipes?

```
select distinct mixin_name as banana_mint_mixin from recipe, ingredients
where recipe.name=recipe_name
and flavorName in ('banana','mint');
```