### Case Study #2 Pizza Runner

Question 1: What are the standard ingredients for each pizza?

	pizza_name	toppings
	Meatlovers	BBQ Sauce ,Pepperoni ,Cheese ,Salami ,Chicken ,Bacon ,Mushrooms ,Beef
	Vegetarian	Tomato Sauce ,Cheese ,Mushrooms ,Onions ,Peppers ,Tomatoes

Meatlovers uses BBQ Sauce, Pepperoni, Cheese, Salami, Chicken, Bacon, Mushrooms, and Beef. Vegetarian uses tomato sauce, Cheese, Mushrooms, Onions, Peppers, and Tomatoes.

Question 2: What was the most added extra?

count	topping_name
1	Chicken
4	Bacon
1	Cheese

Bacon is the most common added extra.

**Question 3:** What was the most common exclusion?

Query #15 Execution time: 1ms	
count	topping_name
1	Mushrooms
1	BBQ Sauce
4	Cheese

Cheese is the most common exclusion.

**Question 4:** Generate an order item for each record in the customers' orders table in the format of one of the following:

Meat Lovers:

Meat Lovers - Exclude Beef:

#### Meat Lovers - Extra Bacon

### Meat Lovers - Exclude Cheese, Bacon - Extra Mushroom, Peppers

order_id	pizza_number	Ріzza Туре
1	1	Meatlovers
2	1	Meatlovers
3	1	Vegetarian
3	2	Meatlovers
4	1	Meatlovers Exclusions - Cheese
4	2	Meatlovers Exclusions - Cheese
4	3	Vegetarian Exclusions - Cheese
5	1	Meatlovers Extras - Bacon
6	1	Vegetarian
7	1	Vegetarian Extras - Bacon
8	1	Meatlovers
9	1	Meatlovers Extras - Bacon, Chicken, Exclusions - Cheese
10	1	Meatlovers Extras - Bacon, Cheese, Exclusions - BBQ Sauce, Mushrooms
10	2	Meatlovers

## Question 5: Generate an alphabetically ordered comma separated ingredient list for each pizza order from the customer orders table and add a 2x in front of any relevant ingredients

### For example: "Meat Lovers: 2xBacon, Beef, ..., Salami"

order_id	customer_id	pizza_number	list
1	101	1	BBQ Sauce, Bacon, Beef, Cheese, Chicken, Mushrooms, Pepperoni, Salami
2	101	1	BBQ Sauce, Bacon, Beef, Cheese, Chicken, Mushrooms, Pepperoni, Salami
3	102	1	Cheese, Mushrooms, Onions, Peppers, Tomato Sauce, Tomatoes
3	102	2	BBQ Sauce, Bacon, Beef, Cheese, Chicken, Mushrooms, Pepperoni, Salami
4	103	1	Salami, Chicken, Pepperoni, Mushrooms, Beef, BBQ Sauce, Bacon
4	103	2	Salami, Chicken, Pepperoni, Mushrooms, Beef, BBQ Sauce, Bacon
4	103	3	Onions, Mushrooms, Tomatoes, Tomato Sauce, Peppers
5	104	1	BBQ Sauce, 2x Bacon, Beef, Cheese, Chicken, Mushrooms, Pepperoni, Salami
6	101	1	Cheese, Mushrooms, Onions, Peppers, Tomato Sauce, Tomatoes
7	105	1	Bacon, Cheese, Mushrooms, Onions, Peppers, Tomato Sauce, Tomatoes
8	102	1	BBQ Sauce, Bacon, Beef, Cheese, Chicken, Mushrooms, Pepperoni, Salami
9	103	1	Salami, 2x Chicken, Pepperoni, Mushrooms, Beef, BBQ Sauce, 2x Bacon
10	104	1	Salami, Chicken, Pepperoni, Beef, 2x Bacon, 2x Cheese
10	104	2	BBQ Sauce, Bacon, Beef, Cheese, Chicken, Mushrooms, Pepperoni, Salami

Not alphabetical (Will get back to it)

# Question 6: What is the total quantity of each ingredient used in all delivered pizzas sorted by most frequent first?

amount_of_extras	amounts
Bacon	14
Mushrooms	13
Chicken	11
Cheese	11
Pepperoni	10
Salami	10
Beef	10
BBQ Sauce	9
Tomatoes	4
Onions	4
Peppers	4
Tomato Sauce	4