### Pizza

**CLEANING DATA SET:**

**CUSTOMER ORDER CLEAN UP:**

Graphical user interface, text, application

Description automatically generated

Table

Description automatically generated

**RUNNER ORDER CLEAN UP**

Graphical user interface, text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

**ALTERING DATATYPE:**

Table

Description automatically generated with low confidence

**A. Pizza Metrics**

1. **How many pizzas were ordered?**

Graphical user interface, text, application

Description automatically generated

1. **How many unique customer orders were made?**

Graphical user interface, text, application

Description automatically generated

1. **How many successful orders were delivered by each runner?**

Graphical user interface, text, application

Description automatically generated

1. **How many of each type of pizza was delivered?**

Graphical user interface, text, application

Description automatically generated

1. **How many Vegetarian and Meat lovers were ordered by each customer?**

Graphical user interface, application

Description automatically generated

1. **What was the maximum number of pizzas delivered in a single order?**

Graphical user interface, text, application

Description automatically generated

1. **For each customer, how many delivered pizzas had at least 1 change and how many had no changes?**

Graphical user interface, text, application, email

Description automatically generated

1. **How many pizzas were delivered that had both exclusions and extras?**

Graphical user interface, text, application

Description automatically generated

1. **What was the total volume of pizzas ordered for each hour of the day?**

Graphical user interface, application, table

Description automatically generated

1. **What was the volume of orders for each day of the week?**

Graphical user interface, text

Description automatically generated

**B. Runner and Customer Experience**

1. **How many runners signed up for each 1-week period? (i.e., week starts 2021-01-01)**

Graphical user interface, text, application

Description automatically generated

1. **What was the average time in minutes it took for each runner to arrive at the Pizza Runner HQ to pick up the order?**

Graphical user interface, text, application

Description automatically generated

1. **Is there any relationship between the number of pizzas and how long the order takes to prepare?**

Table

Description automatically generated with medium confidence

***Yes, as the number of orders increases the time also increases on average***

1. **What was the average distance travelled for each customer?**

Graphical user interface, application

Description automatically generated

1. **What was the difference between the longest and shortest delivery times for all orders?**

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

1. **What was the average speed for each runner for each delivery and do you notice any trend for these values?**

Graphical user interface, text

Description automatically generated

1. **What is the successful delivery percentage for each runner?**

Graphical user interface, text, application, email

Description automatically generated

**C. Ingredient Optimisation**

1. What are the standard ingredients for each pizza?

Graphical user interface, text, application

Description automatically generated

1. What was the most commonly added extra?

Graphical user interface, text, application

Description automatically generated

1. What was the most common exclusion?

Graphical user interface, text, application

Description automatically generated

1. 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

Graphical user interface, text, application

Description automatically generated

1. 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"

Graphical user interface, text, application

Description automatically generated

Text

Description automatically generated

1. What is the total quantity of each ingredient used in all delivered pizzas sorted by most frequent first?

Graphical user interface, text

Description automatically generated with medium confidence

### D. Pricing and Ratings

1. **If a Meat Lovers pizza costs $12 and Vegetarian costs $10 and there were no charges for changes - how much money has Pizza Runner made so far if there are no delivery fees?**

Graphical user interface, text, application

Description automatically generated

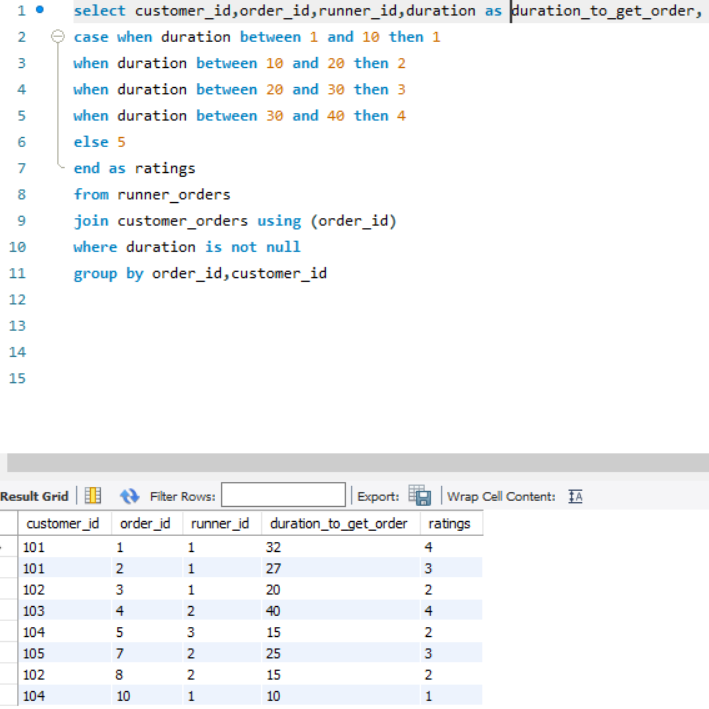
1. **What if there was an additional $1 charge for any pizza extras?**
   * **Add cheese is $1 extra**

Graphical user interface, text, application

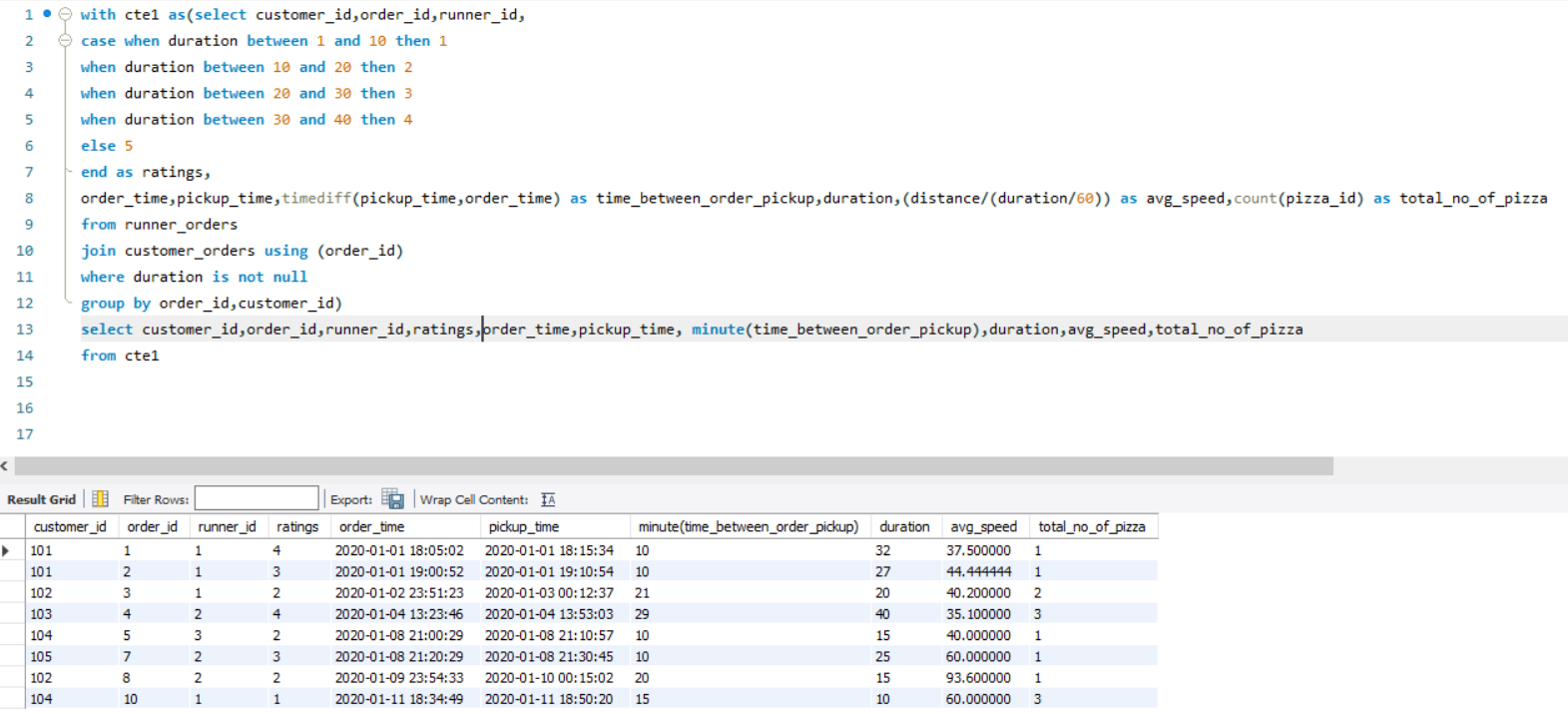
Description automatically generated

1. **The Pizza Runner team now wants to add an additional ratings system**

**that allows customers to rate their runner, how would you design an additional table for this new dataset - generate a schema for this new table and insert your own data for ratings for each successful customer order between 1 to 5.**



1. **Using your newly generated table - can you join all of the information together to form a table which has the following information for successful deliveries?**
   * **customer\_id**
   * **order\_id**
   * **runner\_id**
   * **rating**
   * **order\_time**
   * **pickup\_time**
   * **Time between order and pickup**
   * **Delivery duration**
   * **Average speed**
   * **Total number of pizzas**



1. **If a Meat Lovers pizza was $12 and Vegetarian $10 fixed prices with no cost for extras and each runner is paid $0.30 per kilometre traveled - how much money does Pizza Runner have left over after these deliveries?**

Graphical user interface, application

Description automatically generated