

Homework 5

Homework 5: Expanding your Database

- Please upload your completed assignments to Google Drive.
- Due on Saturday, March 2 at 11:59pm
- Weight: 8% of total grade
- Upload one .sql file with your queries

Cross Join

1. Suppose every vendor in the `vendor_inventory` table had 5 of each of their products to sell to **every** customer on record. How much money would each vendor make per product? Show this by vendor_name and product name, rather than using the IDs.

HINT: Be sure you select only relevant columns and rows. Remember, CROSS JOIN will explode your table rows, so CROSS JOIN should likely be a subquery. Think a bit about the row counts: how many distinct vendors, product names are there (x)? How many customers are there (y). Before your final group by you should have the product of those two queries (x*y).

INSERT

1. Create a new table "product_units". This table will contain only products where the `product_qty_type = 'unit'`. It should use all of the columns from the product table, as well as a new column for the `CURRENT_TIMESTAMP`. Name the timestamp column `snapshot_timestamp`.
2. Using `INSERT`, add a new row to the product_unit table (with an updated timestamp). This can be any product you desire (e.g. add another record for Apple Pie).

DELETE

1. Delete the older record for the whatever product you added.

HINT: If you don't specify a WHERE clause, [you are going to have a bad time](#).

UPDATE

1. We want to add the current_quantity to the product_units table. First, add a new column, `current_quantity` to the table using the following syntax.

```
ALTER TABLE product_units
ADD current_quantity INT;
```

Then, using `UPDATE`, change the `current_quantity` equal to the **last** `quantity` value from the `vendor_inventory` details.

HINT: This one is pretty hard. First, determine how to get the "last" quantity per product. Second, coalesce null values to 0 (if you don't have null values, figure out how to rearrange your query so you do.) Third, `SET current_quantity = (...your select statement...)`, remembering that WHERE can only accommodate one column. Finally, make sure you have a WHERE statement to update the right row, you'll need to use `product_units.product_id` to refer to the correct row within the `product_units` table. When you have all of these components, you can run the update statement.