

Section 1: Advanced SQL JOIN Exercises

In the following advanced SQL exercises, we'll use a sportswear database that stores information about clothes, clothing categories, colors, customers, and orders. It contains five tables: `color`, `customer`, `category`, `clothing`, and `clothing_order`. Let's look at the data in this database.

The `color` table contains the following columns:

- `id` stores the unique ID for each color.
- `name` stores the name of the color.
- `extra_fee` stores the extra charge (if any) added for clothing ordered in this color.

In the `customer` table, you'll find the following columns:

- `id` stores customer IDs.
- `first_name` stores the customer's first name.
- `last_name` stores the customer's last name.
- `favorite_color_id` stores the ID of the customer's favorite color (references the color table).

The `category` table contains these columns:

- `id` stores the unique ID for each category.
- `name` stores the name of the category.
- `parent_id` stores the ID of the main category for this category (if it's a subcategory). If this value is `NULL`, it denotes that this category is a main category. Note: Values are related to those in the `id` column in this table.

The `clothing` table stores data in the following columns:

- `id` stores the unique ID for each item.
- `name` stores the name of that item.
- `size` stores the size of that clothing: S, M, L, XL, 2XL, or 3XL.
- `price` stores the item's price.
- `color_id` stores the item's `color` (references the color table).

- `category_id` stores the item's category (references the category table).

The `clothing_order` table contains the following columns:

- `id` stores the unique order ID.
- `customer_id` stores the ID of the customer ordering the clothes (references the `customer` table).
- `clothing_id` stores the ID of the item ordered (references the `clothing` table).
- `items` stores how many of that clothing item the customer ordered.
- `order_date` stores the date of the order.