# **Promotions -> Features**

In the context of a supermarket dataset, a "promotion" table with a "features" column typically refers to the different types of promotional placements or visibility that products might receive in marketing materials, advertisements, or store displays. Here's an explanation of each feature type:

1. **Not on Feature**:
   * This means the product is not being highlighted in any promotional material or placement. It's just part of the regular assortment without any special visibility.
2. **Interior Page Feature**:
   * The product is featured inside a promotional flyer or catalog. It's not on a prominent front or back page but is somewhere inside the document. This gives it some visibility, but less than a cover page placement.
3. **Wrap Interior Feature**:
   * The product is highlighted on an interior wraparound page, often seen in printed materials like brochures or weekly ads. The wrap usually involves pages that fold out or are adjacent to other content, giving the product special attention but still inside the main body.
4. **Wrap Back Feature**:
   * The product is featured on the back page of a wraparound promotion. This position usually provides high visibility because it's one of the outermost pages that customers see when they pick up or close a promotional flyer.
5. **Interior Page Line Item**:
   * This indicates that the product is listed as a line item within the interior pages of a promotional material. It might not be a large feature or display, but rather just included as part of a list or a section of items on sale.
6. **Wrap Front Feature**:
   * The product is highlighted on the front of a wraparound page or cover, making it one of the first things that a customer sees. This is a highly visible placement, often used for high-priority products or special promotions.
7. **Front Page Feature**:
   * The product is prominently displayed on the front page of a promotional flyer or catalog. This is considered one of the most visible and valuable placements, drawing immediate attention from customers.
8. **Back Page Feature**:
   * The product is featured on the back page of a promotional flyer or catalog. While not as prominent as the front page, the back page is still a highly visible spot, as it is often seen when the promotional material is flipped over.

These terms help indicate the level of emphasis or prominence a product receives in various promotional materials. They can play a crucial role in analyzing the effectiveness of marketing strategies, as certain placements may correlate with higher customer engagement or sales.

# **Promotion -> Display**

In the context of a supermarket dataset, the "display" column in the "promotion" table likely describes the physical placement or display locations of products within the store. Each value refers to a specific spot where a product can be placed for increased visibility or promotional purposes. Here's an explanation of each display type:

1. **Mid-Aisle End Cap**:
   * This refers to a display located at the end of a store aisle, in the middle of the store. End caps are highly visible to customers as they walk through the aisles, making them prime spots for promotions.
2. **Not on Display**:
   * This means the product is not being given any special display space. It's placed in its usual spot on the shelf, without additional visibility.
3. **Rear End Cap**:
   * The product is displayed on an end cap at the back of the store. While not as visible as front or mid-aisle end caps, it can still attract attention from customers navigating through the store.
4. **Store Rear**:
   * The product is placed towards the back of the store, not necessarily in a specific promotional spot like an end cap. This might be a regular location or storage area but can be used for clearance or lesser-highlighted items.
5. **Front End Cap**:
   * This refers to a display at the front of an aisle near the store's entrance or main walkways. Front end caps are one of the most prominent display areas, catching customers' attention as they enter the store or transition between sections.
6. **In-Shelf**:
   * The product is located on a regular shelf, alongside other products. It doesn’t have special promotional display space but is arranged within the normal shelving units.
7. **Store Front**:
   * The product is placed near the front of the store, often close to entrances, exits, or checkout areas. This spot is great for drawing attention to products as customers first walk into or out of the store.
8. **Secondary Location Display**:
   * The product is placed in an additional display location beyond its regular shelf spot. For example, it might be in a standalone display elsewhere in the store, giving it more visibility and accessibility to customers.
9. **In-Aisle**:
   * This means the product is displayed directly within an aisle, but not necessarily in an end cap. It could be on a special rack or highlighted section within the aisle.
10. **Promo/Seasonal Aisle**:
    * The product is featured in a dedicated aisle for promotional or seasonal items. These aisles are set up for holidays or special events (e.g., Christmas, Halloween, summer promotions) and feature products specifically relevant to that time or theme.
11. **Side-Aisle End Cap**:
    * This refers to an end cap on the side aisles, which may be less trafficked compared to front or mid-aisle end caps but still offer a strategic spot to display products to customers navigating through specific areas of the store.

These display terms help retailers understand where products are positioned in the store and can be used to analyze how placement affects customer purchasing behavior. Prime spots like end caps or front store displays tend to draw more customer attention, which can drive sales, especially for promotional or seasonal products.

# **Sales -> Basket**

In the context of a supermarket dataset, if the "sales" table has a column called "basket" with integer values ranging from 1 to 65,000, it likely refers to **basket IDs** or **transaction IDs**. Here’s what this means:

**Meaning of the "Basket" Column**

* The **"basket"** column serves as an identifier for each unique shopping transaction or purchase made by a customer.
* Each integer value represents a distinct **basket or shopping cart** in which a customer has placed one or more items during a single shopping trip.
* For example:
  + A value of **1** might correspond to the first unique shopping basket in the dataset.
  + A value of **65,000** might correspond to the 65,000th unique shopping transaction.

**Use of the "Basket" Column**

* This column helps to **group items** purchased together in a single transaction. It’s useful for understanding what combinations of products customers buy together.
* It can be used for **market basket analysis**, where you look for patterns in the items purchased together (e.g., identifying frequently purchased item pairs like "milk and bread").
* It can also be used to **calculate sales metrics** such as:
  + **Average basket size** (the average number of items per transaction).
  + **Total sales per basket** (the sum of the prices of items in each basket).
  + **Basket value distribution** (analyzing the range of spending between different transactions).

**Example Scenario**

Imagine a customer walks into a store, picks up a loaf of bread, a carton of milk, and a bar of chocolate, and proceeds to the checkout. All these items will be recorded under the same **basket ID** (say, basket ID **1**). Another customer’s purchase of a shampoo bottle and conditioner would be recorded under a different **basket ID** (e.g., basket ID **2**).

By using these basket IDs, you can trace back which items were bought together in each transaction and analyze customer purchase behavior effectively.

# **Sales -> Voucher**

In the context of a supermarket sales dataset, if the "sales" table has a column called **"voucher"** that contains values of **0** or **1**, it likely indicates whether a **voucher** or **coupon** was used during a particular transaction. Here’s a more detailed explanation:

**Meaning of the "Voucher" Column**

* **0**: This value likely indicates that **no voucher or coupon** was used during the transaction. The customer paid the regular price without any discounts or promotions.
* **1**: This value indicates that a **voucher or coupon was applied** during the transaction, meaning the customer received some form of discount or special offer.

**Possible Uses of the "Voucher" Column**

* **Discount Analysis**: It can help analyze the effectiveness of voucher-based promotions. For example, you can compare the sales from transactions with vouchers (1) against those without vouchers (0) to see if the promotion boosted sales.
* **Customer Behavior Analysis**: By studying the frequency of transactions with vouchers, you can understand how many customers are using coupons, which could indicate price sensitivity.
* **Revenue Impact**: You can assess the impact of vouchers on total sales revenue, such as how much discounting is costing the store or how much additional sales the vouchers are generating.

**Example Scenario**

If a customer buys items and uses a discount voucher at checkout, that transaction would have a **voucher value of 1**. If another customer buys items without using any coupon or voucher, the **voucher value for that transaction would be 0**. This data can be useful for understanding how promotional efforts are influencing customer purchase decisions.