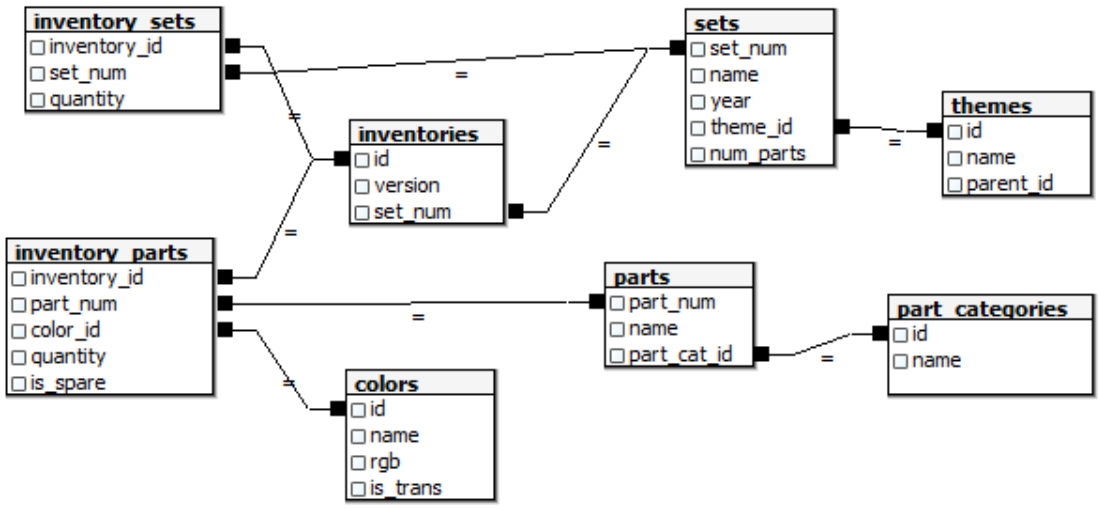
Proyecto “LEGO INC”

Objetivo:

De una base de datos proporcionada por la compañía LEGO se desea saber el estatus de la misma en cuanto a tema de inventarios, además de hacer un análisis de datos, se debe proporcionar una posible causa del problema derivado de dicho análisis, así como una solución.

Bases de Datos:

La información está separada en 8 tablas organizadas bajo el esquema que se muestra a continuación.



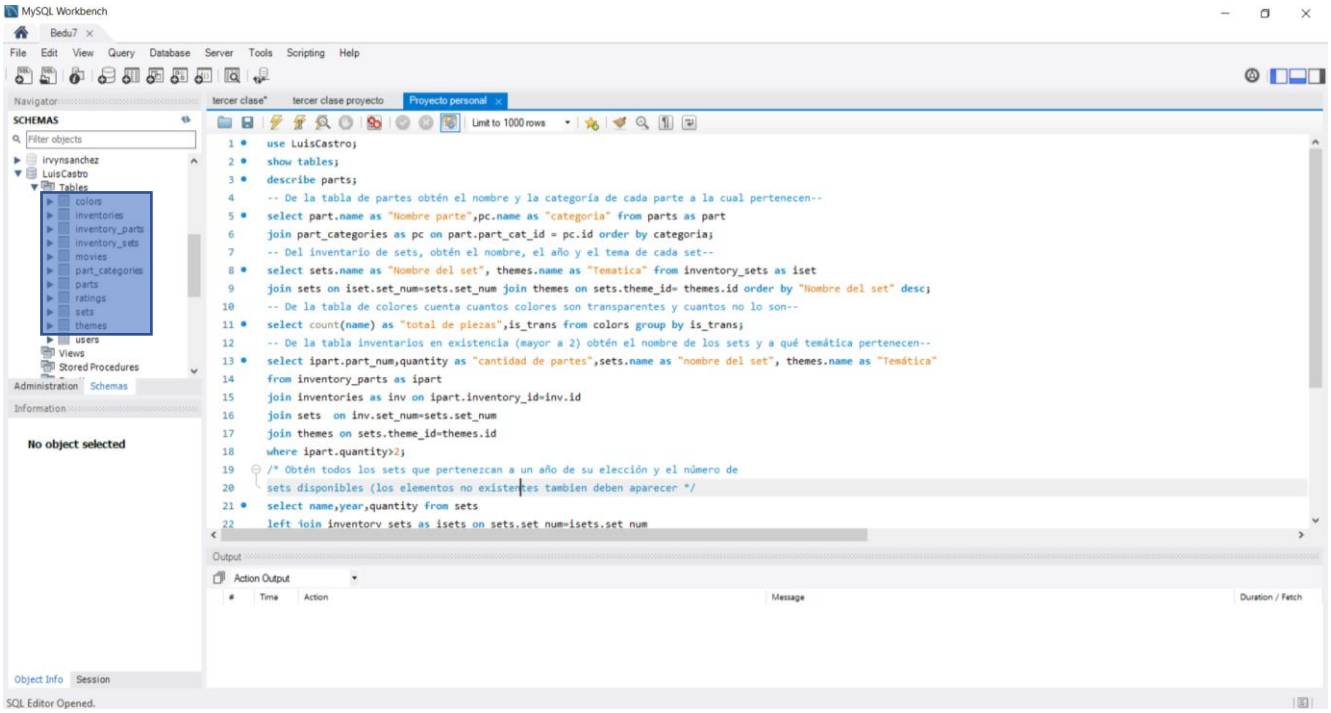
A continuación, se muestra el contenido de cada campo.

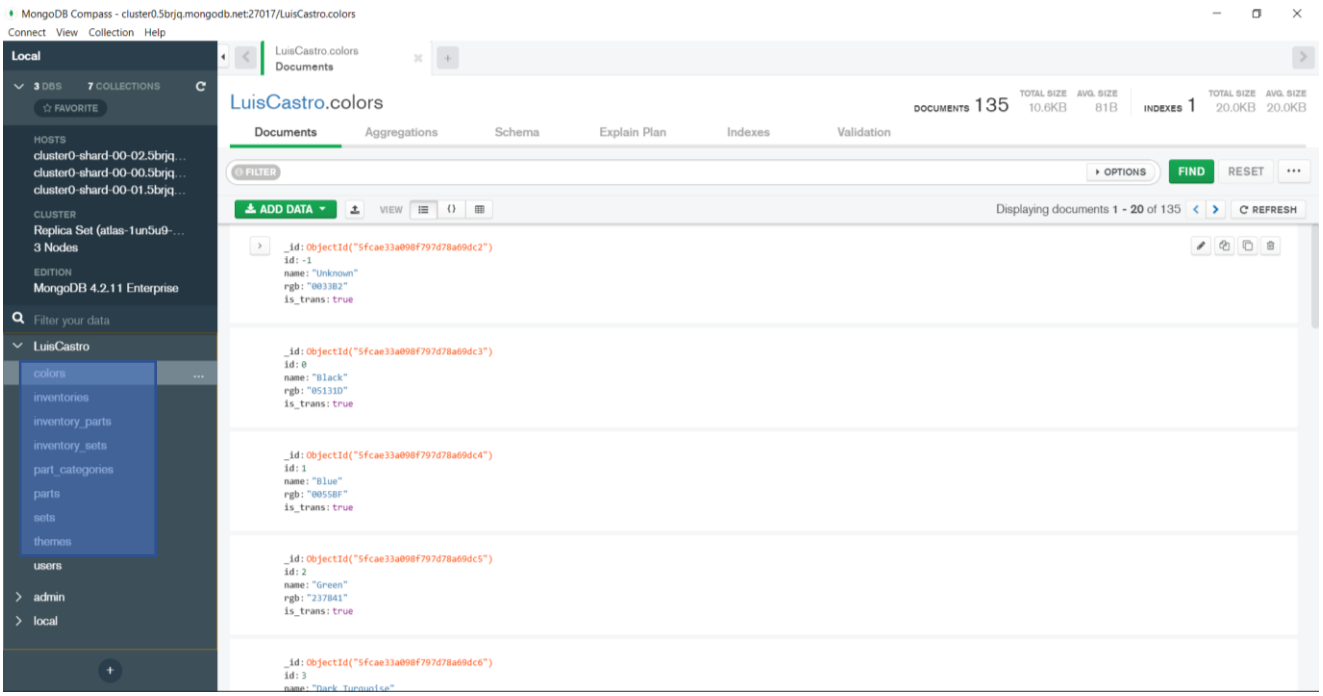
- COLORS
  - Id
    - Unique ID for this color.
  - Name
    - The human-readable name of the color.
  - Rgb
    - The approximate RGB color.
  - is_trans
    - Whether or not the given color is transparent/translucent.
- INVENTORIES
  - Id
    - Unique ID for this inventory entry.
  - Versión
    - Version number.
  - set_num
    - Set number (form `sets.csv`).
- INVENTORY_PARTS

    - inventory_id
        - Unique ID for the inventory this part is appearing in. This is the same as the id value in `inventories.csv`.
    - part_num
        - Unique ID for the part.
    - color_id
        - Unique ID for the color, as per `colors.csv`.
    - Quantity
        - The number of copies of this part included in the set!
    - is_spare
        - Whether or not this is a spare part. Spare parts are additional parts not needed to finish the set.
- INVENTORY_SETS
    - inventory_id
        - Unique inventory ID from `inventories.csv`.
    - set_num
        - Unique set ID from `sets.csv`.
    - quantity
        - The quantity of the inventory included.
- PART_CATEGORIES
    - id
        - Unique ID for the part category.
    - name
        - The category of stuff the part is in.
- Parts
    - part_num
        - Unique ID for the part.
    - name
        - Name of the part
    - part_cat_id
        - Part category unique ID (from `part_categories.csv`).
- Sets
    - Set_num
        - Unique set ID.
    - Name
        - The name of the set.
    - Year
        - Year the set was published.
    - Theme_id
        - Unique ID for the theme used for the set (from `themes.csv`).
    - Num_parts
        - The number of parts included in the set.
- Themes
    - Id
        - Theme unique ID.
    - Name
        - Name of the theme.
    - Parent_id
        - Unique ID for the larger theme, if there is one.

Creación de Bases de datos en MYSQL y MongoDB

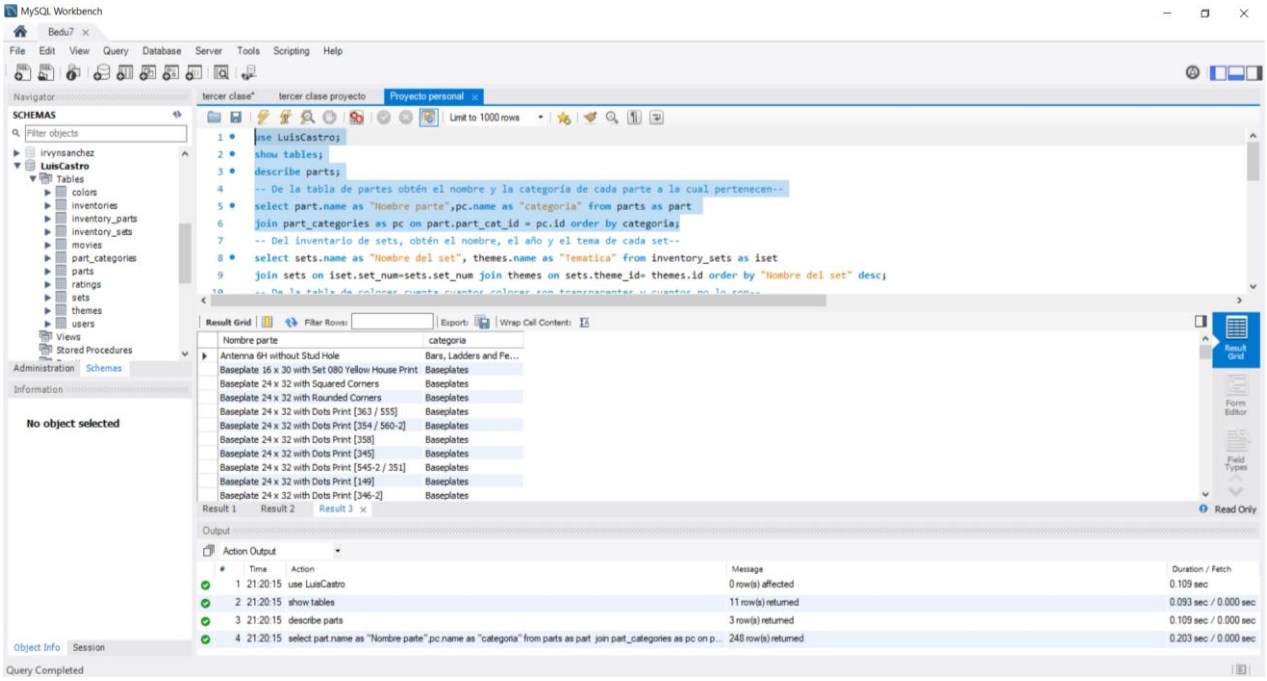
Por motivos de rendimiento y tiempo la base de datos que fue ingresada a MYSQL fue reducida en cantidad de datos, esto puede llegar a causar discrepancias en las consultas.

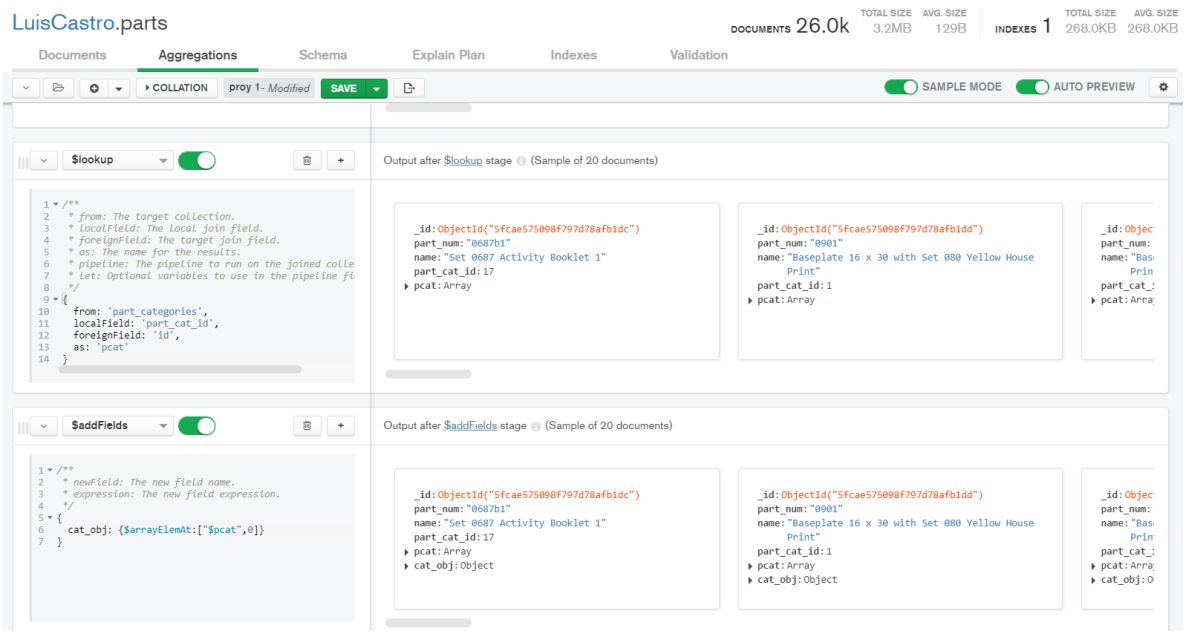


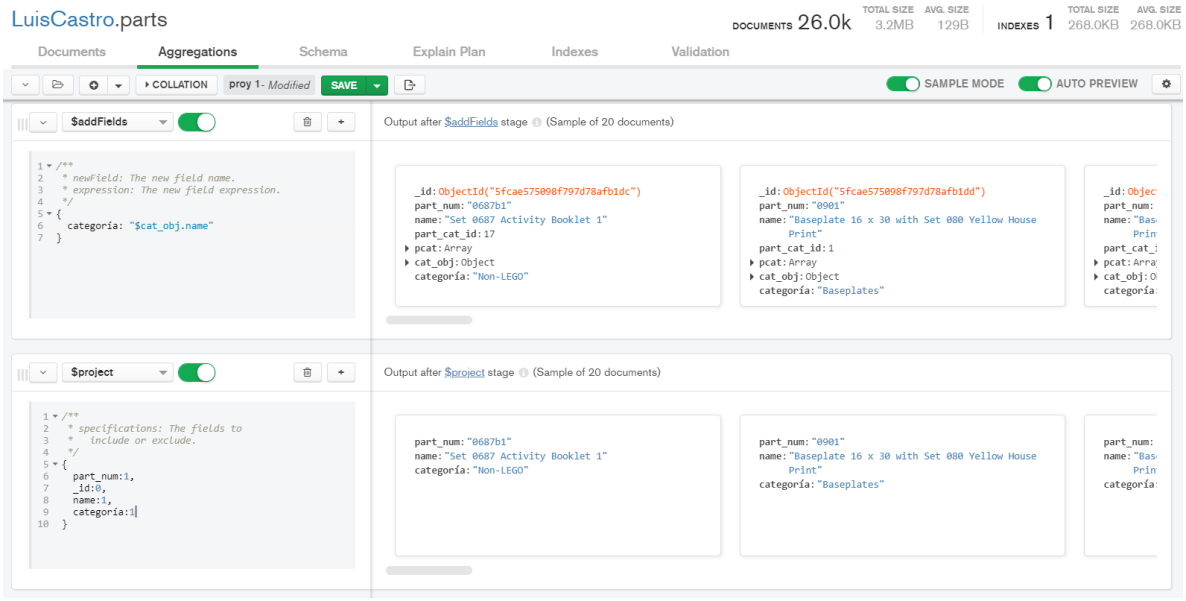


Consultas

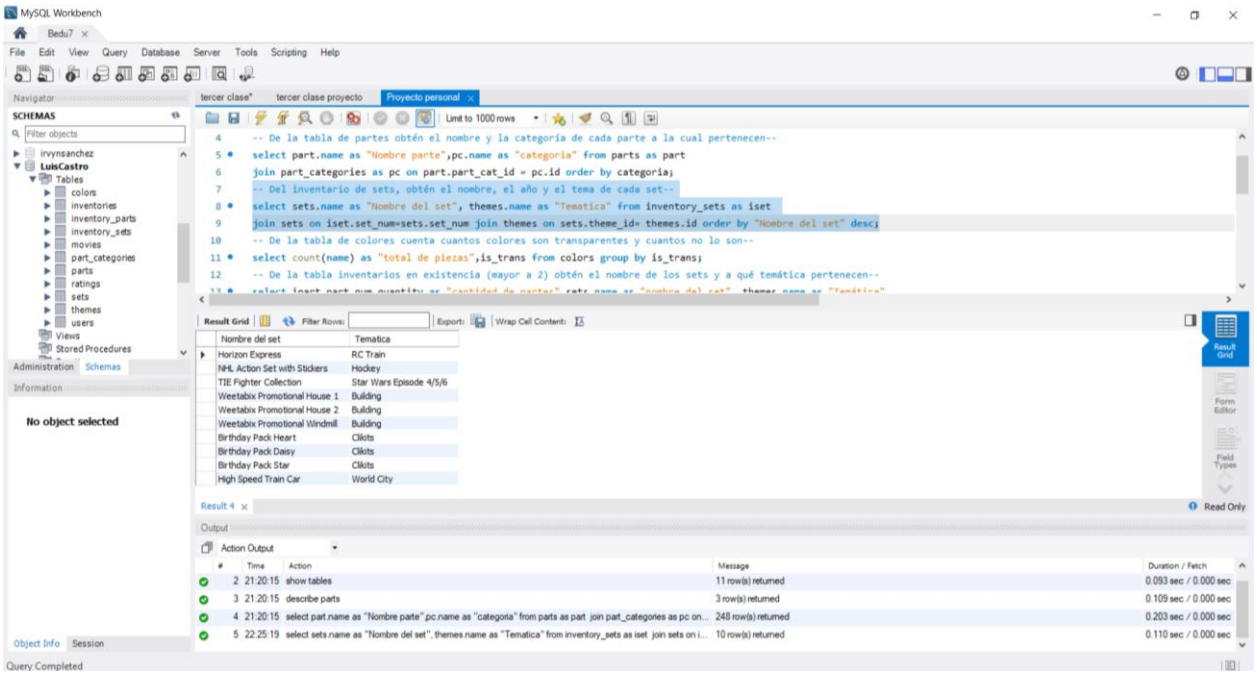
1.-De la tabla de partes obtén el nombre y la categoría de cada parte a la cual pertenecen

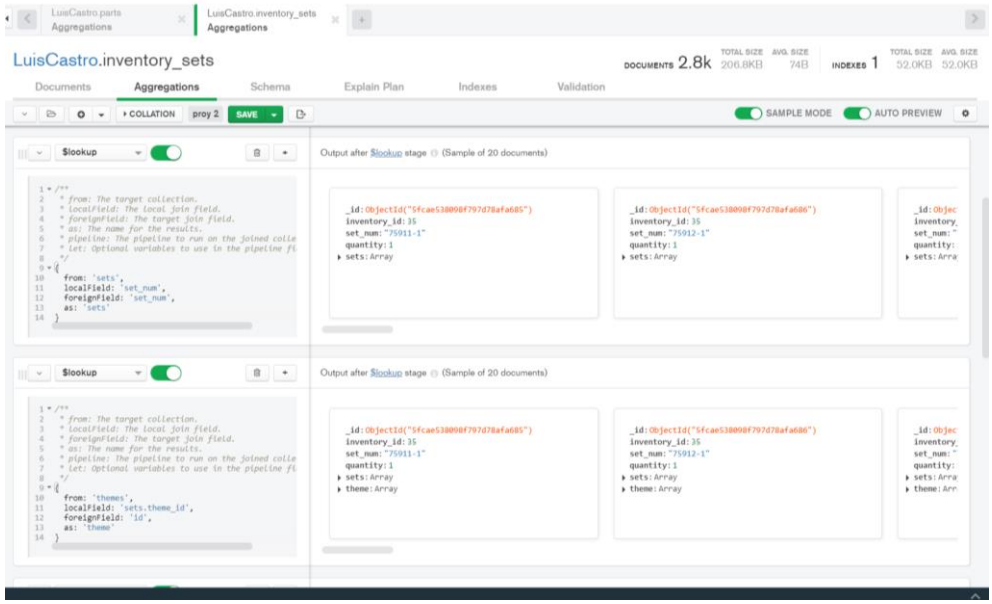


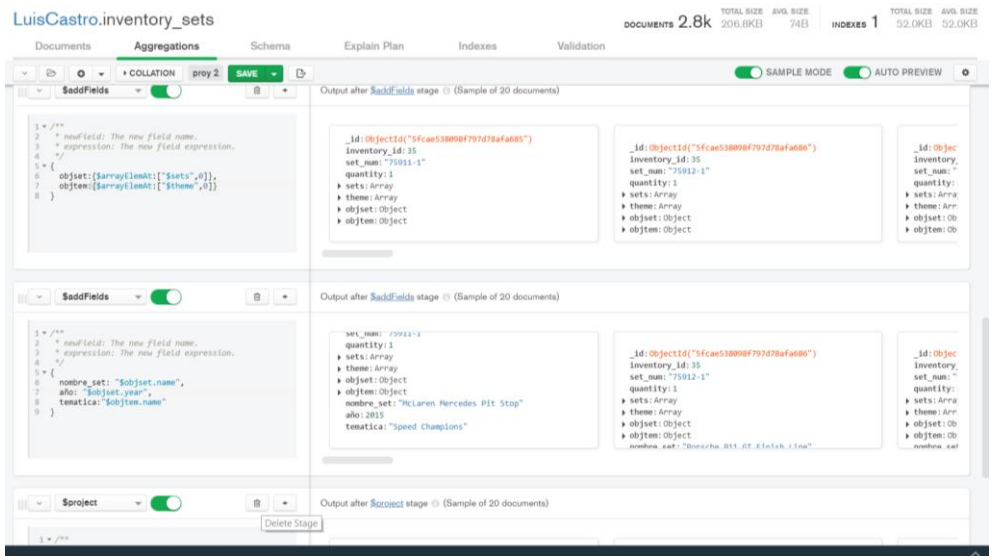


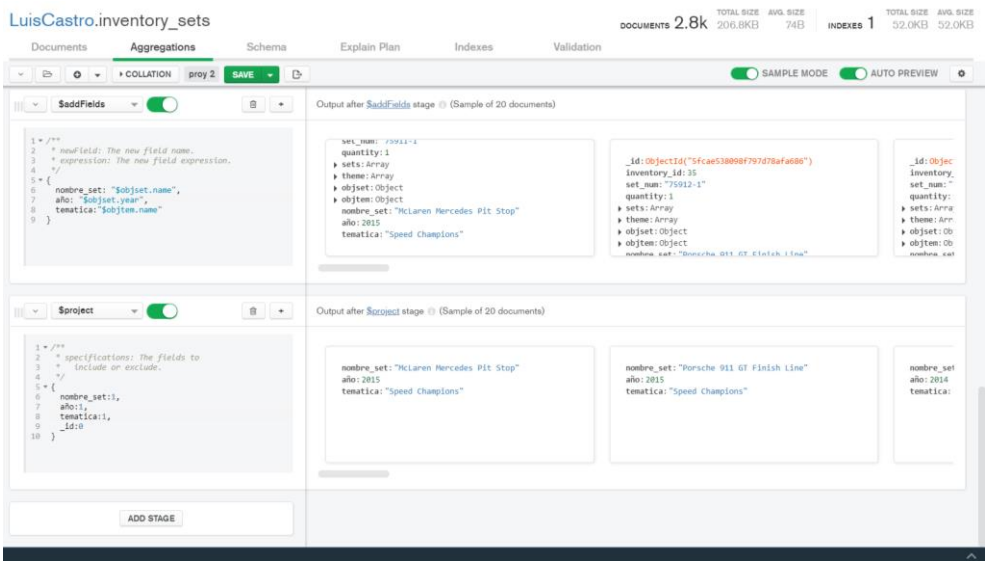


2.-Del inventario de sets, obtén el nombre, el año y el tema de cada set

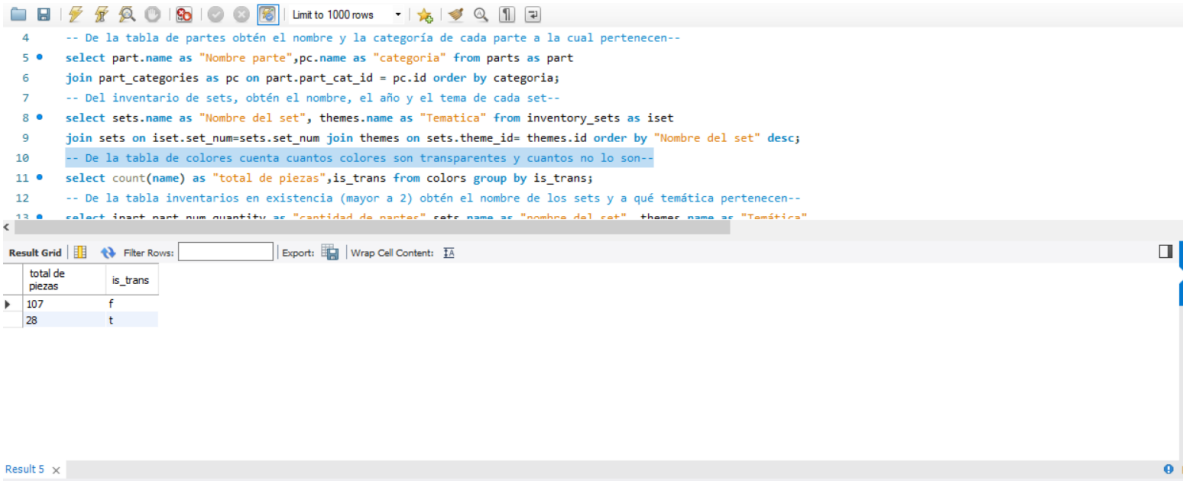


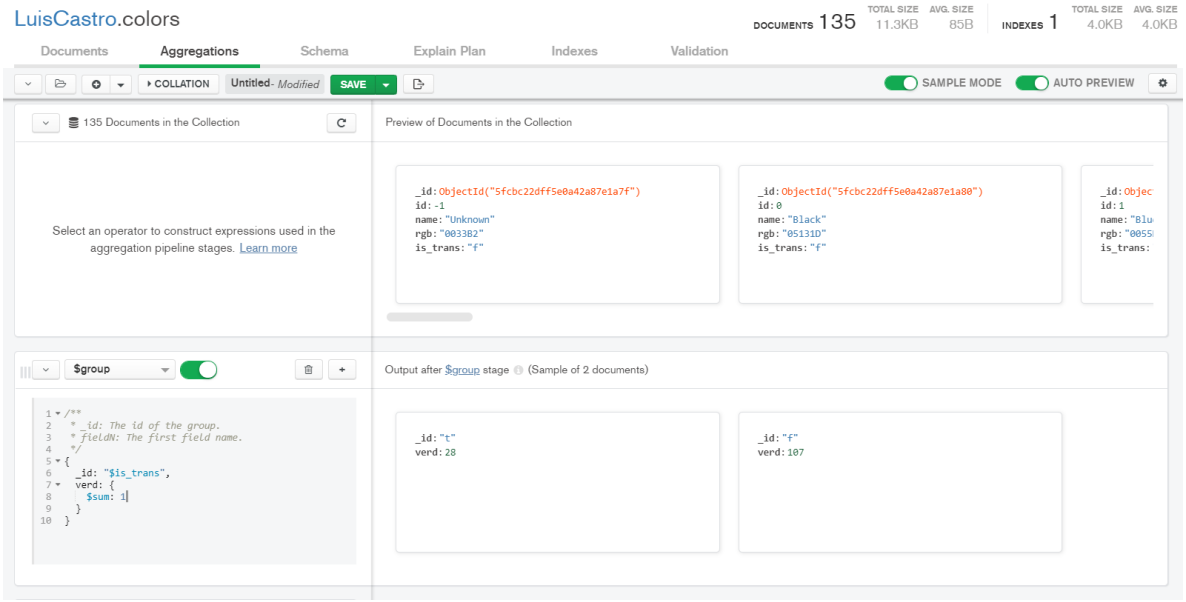

LuisCastro.inventory_sets
Documents
Aggregations
Schema
Explain Plan
Indexes
Validation
$lookup
$lookup


LuisCastro.inventory_sets
Documents
Aggregations
Schema
Explain Plan
Indexes
Validation
$addFields
$addFields
$project
Delete Stage

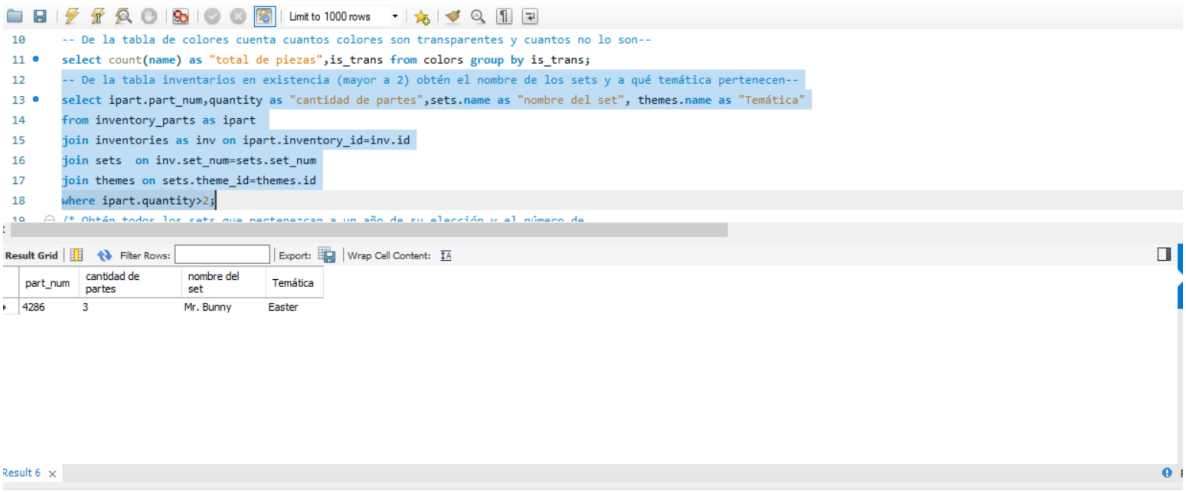


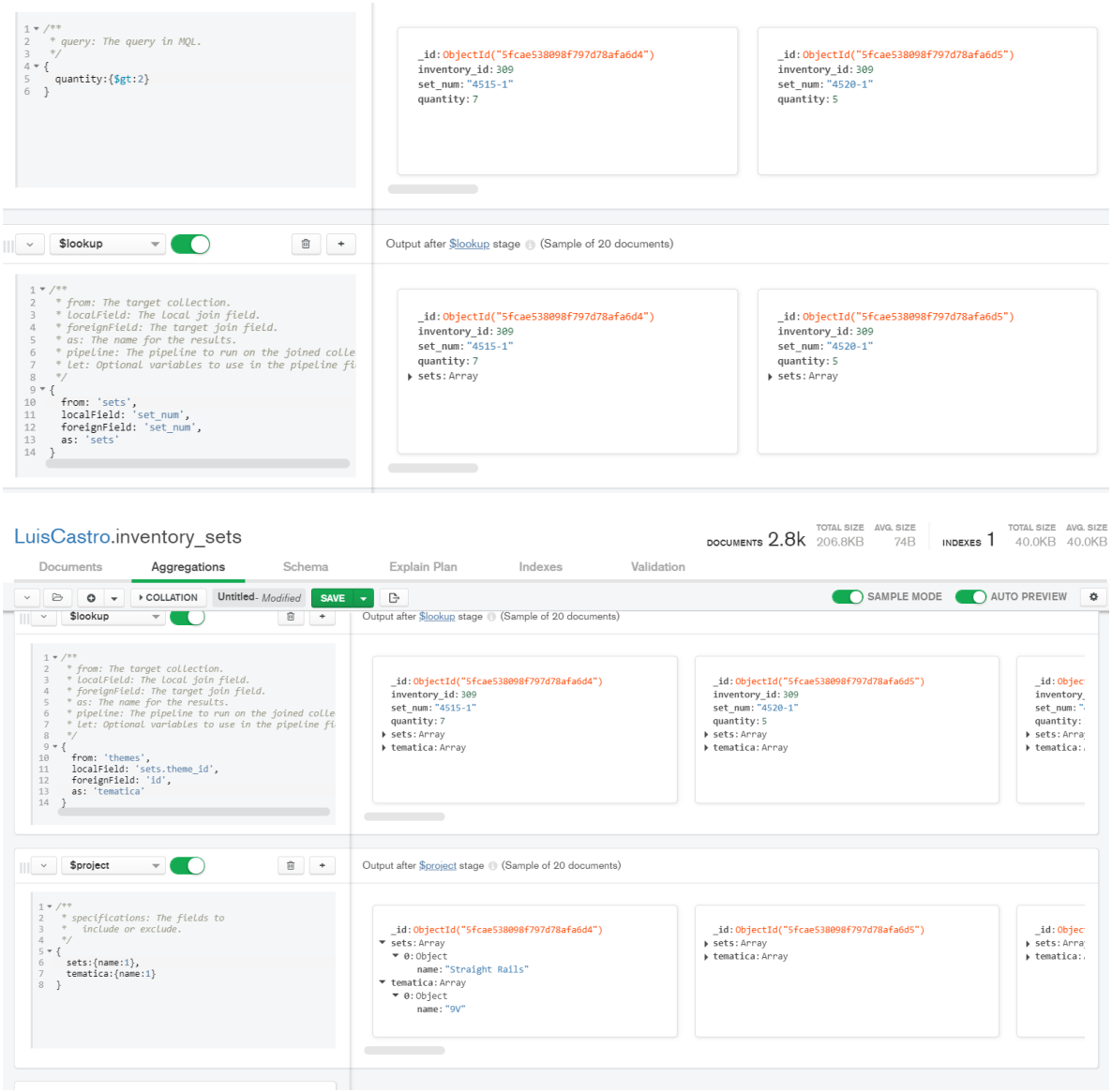
3.- De la tabla de colores cuenta cuantos colores son transparentes y cuantos no lo son





4.- De la tabla inventarios en existencia (mayor a 2) obtén el nombre de los sets y a qué temática pertenecen





/*De la primer consulta, agrega el color a cada parte además */