

## MODULO I FUNDAMENTOS DE BASES DE DATOS

## PROYECTO E-Commerce Olist.

## 1. Definición del proyecto.

## a. Fuentes de Datos:

Facilitado por el instructor Andrés Ramírez.

<https://www.kaggle.com/olistbr/brazilian-e-commerce>

NOMBRE DATASET	ALIAS	REGISTROS	No. COLS	DESCRIPCION
olist_products_dataset	products	32951	9	CATALOGO DE PRODUCTOS CLASIFICACION DE DATOS GEOGRAFICOS POR CIUDAD Y
olist_geolocation_dataset	geolocation	1000163	6	ESTADO CATALOGO DE CODIGO DE
olist_customers_dataset	customers	99441	5	CLIENTES POR CIUDAD Y ESTADO CATALOGO DE CODIGO DE
olist_sellers_dataset	sellers	3095	4	VENDEDORES POR CIUDAD Y ESTADO INFORMACION DE ORDENES DE
olist_orders_dataset	orders	99441	8	COMPRA. DETALLES DE LA COMPRA POR
olist_order_items_dataset	items	112650	8	ORDEN DE COMPRA INFORMACION CON DETALLES DE
olist_order_payments_dataset	payments	103886	6	PAGO DE LAS ORDENES DE COMPRA INFORMACION DE PUNTUACION
olist_order_reviews_dataset	reviews	100000	8	A ORDENES DE COMPRA OTORGADOS POR LOS CLIENTES
Total Registros		<b>1551627</b>		

## b. Problemas a resolver

Conocer los posibles resultados de este conjunto de datos a partir de las siguientes áreas.

AREA	RETOS
Score Card Balance	Identificar top / average / last 5 de vendedores, clientes, ciudad y estado. Identificar las categorías de productos estrellas, promedio y con menos movimiento. Identificar los períodos con más y menos ventas.
Análisis de Texto (Lenguaje Natural)	Analizar el texto de las reseñas del producto. Algunos clientes no escribieron una reseña. Cuál será la razón, ¿por qué están felices o enojados con la categoría de productos? Identificar las categorías de productos que son más propensas a la insatisfacción del cliente.
Predicción de Ventas	Con la información de la fecha de compra, se podrán predecir ventas futuras.
Logística	Identificar las rutas con mayor y menor movimiento. Analizar el rendimiento de la entrega y encontrar formas de optimizar los tiempos de entrega.

	Identificar las categorías de productos que presentan problemas en su entrega. Analizar e identificar tiempos promedios en estatus de pedidos.
Tipos de Pagos	Identificar los tipos de pagos que generan más entradas al negocio.

c. Diccionario de datos de Catálogos.

#### TIPO DE PAGO

payment_type	Descripción
credit_card	TDC
Boleto	Boleto es como la guía de pago del agua en CDMX. Por ejemplo, quiero comprar una bici que cuesta \$10k en un eCommerce y pongo que la pago con boleto. El sitio me da un número con el cual puedo ir abonando dinero hasta pagar el total. Puedo hacer pagos en tiendas de abarrotes, bancos y en distintas apps. Es un sistema del Banco Central de Brasil
Voucher	Voucher es como OXXO Pay: es la emisión de un número para un prepago. Se espera que se pague completo en el momento para abonar saldo o completar el pago por un bien.
debit_card	TDC
not_defined	

#### TIPOS DE ESTATUS DE PEDIDO

order_status	Descripción
delivered	Entregado
invoiced	Facturado
shipped	Enviado
processing	Procesado
unavailable	No disponible
canceled	Cancelado
created	Creado
approved	Aprobado

#### TABLA DE PUNTUACION A PRODUCTOS

review_score	Clima	Descripción

	Não chegou meu produto não recebi ainda Produto pirata! Produto diferente da ilus PRODUTO PIASSIMO Meu produto não chegou Entrega atrasada ENTRAGOU NO PRIMEIRO DIA Não entregou no tempo . Atraso na data de entrega Entrega Parcial. Não recebi os dois produt Produto com avaria falta de produto e quebra Pedido cancelado Defeito Produto errado Produto veio diferente
1	não confere o produto Não recebi o produto Foto não condiz Relogio Gato Produto não entregue Não posso dizer ainda Vidro estragado regular Produto avariado Caixa rasgada não recomendo Produto riscado CANCELADO_AGUARD._ESTORNO Deceptionou um pouco PRODUTO NAO ENTREGUE

Não recebi o produto.  
Entrega atrasou  
recomendo  
Erraram na caixa acústica  
Recomendo, com restrições  
Boa qualidade  
Recomendo a loja, sempre!  
Bom  
Muito bom  
nao  
Recebi produto diverso  
sim, recomendo \*\*\*  
Talvez recomendaria  
Produto mal embalado  
eu me arrependo da compra  
Atraso na entrega  
Avaliação  
bolo fake  
Media  
FALTOU ITENS  
O produto veio quebrado

recomendo  
Muito bom.  
Chegou  
Bom  
dessa vez veio rÁpido  
Produto de boa qualidade  
Recomendo  
Entrega perfeita  
Muito bom  
Boa  
Rapidez  
Bom produto  
Tudo ok  
BOA COMPRA  
Entrega  
Satisfeito  
Aquecedor a gas  
Ok  
recomendado  
Excelente o produto Í\_timo  
Otimo atendimento  
Rapidez e qualidade  
Entrega antes do prazo  
Funciona  
Pontual  
Entrega super rapida  
Gostei  
normal  
Positiva  
otimo

	<p>Super recomendo</p> <p>!Ótimo</p> <p>Bom</p> <p>Maravilhoso!</p> <p>Entrega perfeita</p> <p>MT lindo</p> <p>!Ótimo Produto!</p> <p>RECOMENDO SEMPRE!!</p> <p>***** Recomendo</p> <p>OTIMO</p> <p>muito boa</p> <p>prazo entrega</p> <p>Super produto</p> <p>Entrega antes do previsto</p> <p>Recomendo</p> <p>Top</p> <p>produto show</p> <p>super recoendo</p> <p>!Ótima compra</p> <p>Muito bom.</p> <p>Perfeito</p> <p>Excelente</p> <p>Produto excelente!</p> <p>muito satisfeito =]</p> <p>muito bom e bonito</p> <p>Aprovo e recomendo</p> <p>Tudo Ok!</p> <p>Excelente produto</p> <p>Super recomendado</p> <p>entrega super rapida</p> <p>Entrega no Prazo.</p> <p>PERFEITO!!!!</p> <p>otimo produto</p> <p>Muito satisfeito</p> <p>Satisfeita</p> <p>Recomendo</p>
5	

## CATALOGO DE CATEGORIAS DE PRODUCTOS

id	product_category_name	product_category_name_english
1	beleza_saude	health_beauty
2	informatica_acessorios	computers_accessories
3	Automotivo	Auto
4	cama_mesa_banho	bed_bath_table
5	moveis_decoracao	furniture_decor
6	esporte_lazer	sports_leisure
7	Perfumaria	Perfumery
8	utilidades_domesticas	Housewares
9	Telefonía	Telephony
10	relogios_presentes	watches_gifts

11	alimentos_bebidas	food_drink
12	Bebes	baby
13	Papelaria	stationery
14	tablets_impressao_imagem	tablets_printing_image
15	Brinquedos	toys
16	telefonia_fixa	fixed_telephony
17	ferramentas_jardim	garden_tools
18	fashion_bolsas_e_acessorios	fashion_bags_accessories
19	Eletroportateis	small_appliances
20	consoles_games	consoles_games
21	Audio	audio
22	fashion_calcados	fashion_shoes
23	cool_stuff	cool_stuff
24	malas_acessorios	luggage_accessories
25	Climatizacao	air_conditioning
26	construcao_ferramentas_construcao	construction_tools_construction
27	moveis_cozinha_area_de_servico_jantar_e_jardim	kitchen_dining_laundry_garden_furniture
28	construcao_ferramentas_jardim	construction_tools_garden
29	fashion_roupa_masculina	fashion_male_clothing
30	pet_shop	pet_shop
31	moveis_escritorio	office_furniture
32	market_place	market_place
33	Eletronicos	electronics
34	Eletrodomesticos	home_appliances
35	artigos_de_festas	party_supplies
36	casa_comforto	home_comfort
37	construcao_ferramentas_ferramentas	construction_tools_tools
38	agro_industria_e_comercio	agro_industry_and_commerce
39	moveis_colchao_e_estofado	furniture_mattress_and_upholstery
40	livros_tecnicos	books_technical
41	casa_construcao	home_construction
42	instrumentos_musicais	musical_instruments
43	moveis_sala	furniture_living_room
44	construcao_ferramentas_iluminacao	construction_tools_lights
45	industria_comercio_e_negocios	industry_commerce_and_business
46	Alimentos	food
47	Artes	art
48	moveis_quarto	furniture_bedroom
49	livros_interesse_geral	books_general_interest
50	construcao_ferramentas_seguranca	construction_tools_safety
51	fashion_underwear_e_moda_praia	fashion_underwear_beach
52	fashion_esporte	fashion_sport
53	sinalizacao_e_seguranca	signaling_and_security
54	Pcs	computers
55	artigos_de_natal	christmas_supplies
56	fashion_roupa_feminina	fashion_female_clothing
57	eletrodomesticos_2	home_appliances_2
58	livros_importados	books_imported

59	Bebidas	drinks
60	cine_foto	cine_photo
61	la_cuisine	la_cuisine
62	Música	music
63	casa_comforto_2	home_comfort_2
64	portateis_casa_forno_e_cafe	small_appliances_home_oven_and_coffee
65	cds_dvds_musicais	cds_dvds_musicals
66	dvds_blu_ray	dvds_blu_ray
67	Flores	flowers
68	artes_e_artesanato	arts_and_craftmanship
69	fraldas_higiene	diapers_and_hygiene
70	fashion_roupa_infantil_juvenil	fashion_childrens_clothes
71	seguros_e_servicos	security_and_services

## 2. Creación de Base de Datos en MySQL

Se usaron dos funcionalidades para la creación y alimentación de la BD.

- Se usó la opción “Tabla Data Import Wizard” para la creación e importación de tablas y datos. Desafortunadamente, la cantidad de registros que se añadían era muy insuficiente, por lo que se utilizó la carga de datos mediante scripts para las 8 tablas que componen el dataset.

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** frasgado (selected), fabiolaPerez, FabiolaPerezR, FernandoHidalgo
- Tables:** payments (selected), customers, sellers
- Context Menu (open over payments table):**
  - Copy to Clipboard
  - Send to SQL Editor
  - Create Schema...
  - Alter Schema...
  - Drop Schema...
  - Search Table Data...
  - Refresh All
  - Table Data Import Wizard** (highlighted)
- Output Panel:** Shows the results of the last 10 actions taken on the table, all of which were successful inserts into the 'payments' table.
- System Bar:** Shows the session name 'Bedu-20-07', the date '02/07/2020', and the time '07:06 a.m.'.

MySQL Workbench

Bedu-07-07NOVIEMBRE2020

File Edit View Query Database Server Tools Scripting Help

Navigator Schemas

Schema: frasgado

Tables

customers

columns:

- customer\_id
- customer\_unique\_id
- customer\_zip\_code\_prefix
- customer\_city
- customer\_state

Action Output

#	Time	Action	Message	Duration / Fetch
4548	02:09:14	insert into customers (customer_id, customer_unique_id, customer_zip_code_prefix, customer_city, customer_state) values ('6ecb390e8056057a2')	1 row(s) affected	0.110 sec
4549	02:09:15	insert into customers (customer_id, customer_unique_id, customer_zip_code_prefix, customer_city, customer_state) values ('31d5d04d4657892a8')	1 row(s) affected	0.172 sec
4550	02:09:15	insert into customers (customer_id, customer_unique_id, customer_zip_code_prefix, customer_city, customer_state) values ('b4b0c0b00e3f72d82a')	1 row(s) affected	0.125 sec
4551	02:09:15	insert into customers (customer_id, customer_unique_id, customer_zip_code_prefix, customer_city, customer_state) values ('f719c619448f72d2e')	1 row(s) affected	0.218 sec
4552	02:09:15	insert into customers (customer_id, customer_unique_id, customer_zip_code_prefix, customer_city, customer_state) values ('0590c3c795016c3e5')	1 row(s) affected	0.141 sec
4553	02:09:15	insert into customers (customer_id, customer_unique_id, customer_zip_code_prefix, customer_city, customer_state) values ('625243048f1ccf53f')	1 row(s) affected	0.156 sec

Output

Result Grid

Count(\*)

103886

Action Output

#	Time	Action	Message	Duration / Fetch
40406	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.093 sec
40407	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.094 sec
40408	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.094 sec
40409	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.078 sec
40410	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.094 sec
40411	08:20:19	select count(*) from payments	1 row(s) returned	0.110 sec / 0.000 sec

Al final, las tablas que se contemplaron se muestran en la siguiente imagen.

MySQL Workbench

Bedu-07-07NOVIEMBRE2020

File Edit View Query Database Server Tools Scripting Help

Navigator Schemas

Schema: frasgado

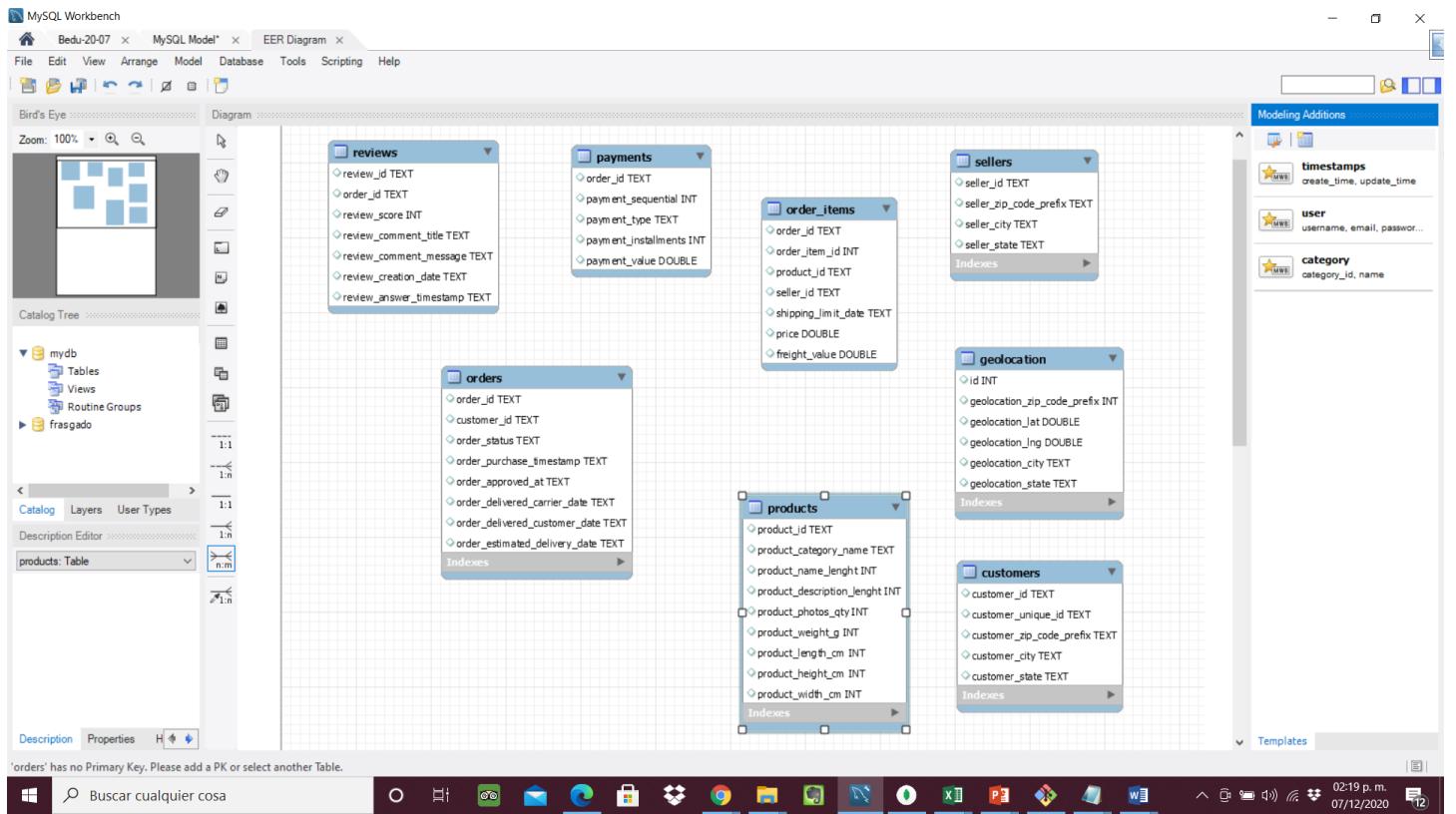
Tables

payments

Action Output

#	Time	Action	Message	Duration / Fetch
40406	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.093 sec
40407	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.094 sec
40408	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.094 sec
40409	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.078 sec
40410	07:52:27	insert into payments (order_id, payment_sequential, payment_type, payment_installments, payment_value) values (1, 1, 'boleto', 1, 100)	1 row(s) affected	0.094 sec
40411	08:20:19	select count(*) from payments	1 row(s) returned	0.110 sec / 0.000 sec

## Esquema de Base de Datos



### 3. Creación de Base de Datos en MongoDB

En MongoDB, fue rápido la subida de información y la creación de las colecciones.

The screenshot shows the MongoDB Compass interface connected to a cluster. The left sidebar shows the database structure:

- HOSTS: cluster0-shard-00-01-76pg..., cluster0-shard-00-00-76pg..., cluster0-shard-00-02-76pg...
- CLUSTER: Replica Set (atlas-env04-... 3 Nodes)
- EDITION: MongoDB 4.2.11 Enterprise
- Filter your data
- admin
- frasgado
  - 2019-nCoV-cases-JHU
  - CoV-cases
  - customers
  - directory
  - geolocation
  - h1n1
  - items
  - orders
  - payments
  - products
  - reviews
- MongoSH Beta

The main area displays the collection list for the 'frasgado' database:

Collection Name	Documents	Avg. Document Size	Total Document Size	Num. Indexes	Total Index Size	Properties
2019-nCoV-cases-JHU	4,709	194.5 B	894.5 KB	1	56.0 KB	
CoV-cases	4,709	189.6 B	872.0 KB	1	76.0 KB	
customers	99,441	218.3 B	20.7 MB	1	896.0 KB	
directory	25,600	379.6 B	9.3 MB	1	284.0 KB	
geolocation	1,000,163	178.3 B	170.1 MB	1	9.6 MB	
h1n1	1,822	100.5 B	178.8 KB	1	52.0 KB	
items	112,650	270.7 B	29.1 MB	1	1.0 MB	
orders	99,441	403.0 B	38.2 MB	1	916.0 KB	
payments	103,886	186.8 B	18.5 MB	1	956.0 KB	
products	32,951	3070.0 B	9.6 MB	1	328.0 KB	
reviews	100,000	314.6 B	30.0 MB	1	880.0 KB	

The bottom status bar indicates '02:57 a. m. 05/12/2020'.

### 4. Consultas realizadas.

1. ¿Cuáles son las categorías de productos que el E-commerce Olist ofrece en sus tiendas?

## MYSQL

```
use frasgado;
select distinct(product_category_name) from products order by product_category_name;
```

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'Navigator' with 'SCHEMAS' expanded, showing databases like 'Bedu-20-07', 'FabiolaReyesProj', 'FabiolaPerez', 'FabiolaPerezR', 'FernandoHidalgo', and 'frasgado'. Under 'frasgado', the 'Tables' section is expanded, showing 'customers', 'geolocation', 'payments', 'orders', 'order\_items', and 'products'. The 'products' table is selected, and its columns are listed: product\_id, product\_category\_name, product\_name\_length, product\_descriptio...\_by, product\_weight\_g, product\_length\_cm. The main pane shows the query: 'use frasgado; select distinct(product\_category\_name) from products order by product\_category\_name;'. The results grid displays 54 rows of category names, including 'ferramentas\_jardin', 'industria\_comercio\_e\_negocios', 'informatica\_accesorios', 'instrumentos\_musicais', 'la\_culinaria', 'livros\_interesse\_geral', 'livros\_tecnicos', 'mais\_acessorios', 'mater\_papel', 'movies\_cozinha\_area\_de\_servico\_jan...', 'movies\_decoracao', 'movies\_escritorio', 'movies\_sala', 'musica', 'papelaria', 'pcs', 'perfumaria', 'pet\_shop', 'relogios\_presentes', 'seguranca\_e\_seguranca', and 'vitoria'. The bottom status bar indicates 'Query Completed' at 14:32:35 on 05/12/2020.

## MONGODB

```
[{$project: {
  _id: 0,
  product_category_name: 1
}}, {$match: {
  product_category_name:
  {$ne: "" }
}}]
```

The screenshot shows the MongoDB Compass interface with the following details:

- Left Sidebar (Local):** Lists databases (cluster0) and collections (admin, frasgado, 2019-nCoV-cases-JHU, CoV-cases, customers, directory, geolocation, hml, items, orders, payments, products, reviews).
- Top Bar:** Connect, View, Collection, Help.
- Central Area:**
  - Collection:** frasgado.products
  - Tab:** Aggregations (selected)
  - Statistics:** DOCUMENTS 33.0k, TOTAL SIZE 0.6MB, AVG. SIZE 307B, INDEXES 1, TOTAL SIZE 328.0KB, AVG. SIZE 328.0KB.
  - Stages:**
    - \$project:** Includes '\_id', 'product\_category\_name', and 'product\_id'.
    - \$match:** Filters by 'product\_category\_name': 'perfumeria' or 'artes'.
  - Output:** Shows sample documents for 'perfumeria' and 'artes' categories.
- Bottom:** MongoSH Beta terminal window.

## 2. Obtener número de ventas clasificadas por Año.

MySQL

```

select
year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as anio,
count(*) as NuVentas
from orders
group by
year(str_to_date(order_purchase_timestamp, '%d/%m/%Y'))
order by year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) desc ;

```

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator: session02\_07NOVIEMBRE2020 Sesion03-14112020 20-07-PROYECTO-SESION-03... SQL File 5\* SQL File 6\* orders reviews customers sellers SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

**SCHEMAS**

- FabiolaPerez
- fabiolaPerez
- FabiolaPerezR
- FernandoHidalgo
- frasgado**

**Tables**

- customers
- geolocation
- movies
- order\_items
- orders
- payments
- products
- ratings
- reviews
- sellers

Administration Schemas

Information Result Grid Filter Rows: Export: Wrap Cell Content:

Schema: **frasgado**

anio	NuVentas
2018	54011
2017	45101
2016	329

Result 18 x Read Only Context Help Snippets

Object Info Session Output Action Output

Query Completed

Buscar cualquier cosa

## MONGODB

```
[{$addFields: {
    FechaVenta: {
        $dateFromString: {
            dateString: '$order_purchase_timestamp',
            format: '%Y-%m-%d %H:%M:%S'
        }
    }
}, {$addFields: {
    anio: {
        $year: "$FechaVenta"
    },
    mes: {
        $month: "$FechaVenta"
    }
}}, {$group: {
    _id: "$anio",
```

NoVentas: {

\$sum : 1

}

}])

The screenshot shows the MongoDB Compass interface with the 'frasgado.orders' collection selected. The pipeline stages are:

- `$_id: ObjectId("5fc3e0eee1fb4dd4117a5a")`
- `order_id: "e481f1c1dc5467bdcc49116f2d6ef7"`
- `customer_id: "53cd2fc7dce0b6741e215b273451"`
- `order_status: "delivered"`
- `order_purchase_timestamp: "2017-10-02 10:56:33"`
- `order_approved_at: "2017-10-02 11:07:15"`
- `order_delivered_carrier_date: "2017-10-04 19:55:00"`
- `order_delivered_customer_date: "2017-10-10 21:25:13"`

Output after `$addFields` stage (Sample of 20 documents):

```
1 * /**
2 * newField: The new field name.
3 * expression: The new field expression.
4 */
5 {
6   anio: {
7     year: "$Fechaventa"
8   },
9   mes: {
10     month: "$Fechaventa"
11   }
12 }
```

Output after `$group` stage (Sample of 3 documents):

```
1 /**
2 * _id: The id of the group.
3 * fieldN: The first field name.
4 */
5 {
6   _id: "$anio",
7   NoVentas: {
8     $sum: 1
9   }
10 }
```

Final output:

_id	NoVentas
2018	54011
2017	45101
2018	329

3. Obtener número de ventas agrupados por Año y Mes, ordenados por los siguientes criterios:

- Año ordenado de forma descendente.
- Mes ordenado de forma ascendente.

MYSQL

```
select year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as anio,
month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as mes,
count(*) as NuVentas
from orders
group by
year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')), month(str_to_date(order_purchase_timestamp, '%d/%m/%Y'))
order by year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) desc ,
month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) asc
;
```

The screenshot shows the MySQL Workbench interface. In the top-left, there are tabs for 'Bedu-20-07', 'MySQL Model\*', and 'EER Diagram'. The main area is a query editor with the following SQL script:

```

20
21 • select year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as anio,
22 month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as mes,
23 count(*) as NuVentas
24 from orders
25 group by
26 year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')), month(str_to_date(order_purchase_timestamp, '%d/%m/%Y'))
27 order by year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) desc , month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) asc
28 ;
29
30
31
32 -- select str_to_date(order_purchase_timestamp, '%d/%m/%Y') from orders;

```

The results grid shows the following data:

anio	mes	NuVentas
2018	1	7269
2018	2	6728
2018	3	7211
2018	4	6939
2018	5	6873
2018	6	6167
2018	7	6292
2018	8	6512
2018	9	16
2018	10	4
2017	1	800
2017	2	1780
2017	3	2682

On the right side of the interface, there is a note: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." Below the note, there are icons for 'Result Grid', 'Form Editor', and 'Field Types'.

```

[{$addFields: {

FechaVenta: {

$dateFromString: {

dateString: '$order_purchase_timestamp',
format: '%Y-%m-%d %H:%M:%S'

}

}

}, {$addFields: {

anio: {

$year: "$FechaVenta"

},

mes: {

$month: "$FechaVenta"

}

}}, {$group: {

_id: {

anio: "$anio",
mes: "$mes"
}
}
}
]

```

```
        },
        NoVentas: {
            $sum: 1
        }
    }}, {$sort: {
        anio: 1,
        mes: 1
    }}, {$addFields: {
        byAnio: "$_id.anio",
        byMonth: "$_id.mes"
    }}, {$project: {
        _id: 0,
        byAnio: 1,
        byMonth: 1,
        NoVentas: 1
    }}, {$sort: {
        byAnio: -1,
        byMonth: 1
    }}]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations

**frasgado.orders**

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION NUMERO\_VENTAS\_POR\_ANIO\_y\_MES SAVE

DOCUMENTS 99.4k TOTAL SIZE 38.2MB AVG. SIZE 403B INDEXES 1 TOTAL SIZE 916.0KB AVG. SIZE 916.0KB

SAMPLE MODE AUTO PREVIEW

99441 Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

Preview of Documents in the Collection

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "e481f51c1bcd5467807c4c9136fd2d6af7"  
customer\_id: "9ef432eb6251297304e76186b10a928d"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-10-02 10:56:33"  
order\_approved\_at: "2017-10-02 11:07:15"  
order\_delivered\_carrier\_date: "2017-10-10 19:55:00"  
order\_delivered\_customer\_date: "2017-10-10 21:25:13"  
order\_estimated\_delivery\_date: "2017-10-10 20:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "53cdb2fc8bc7dcce0b6741e2150273451"  
customer\_id: "b0830fb4747ac6cd20deab8c802d7ef"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2018-07-24 20:41:37"  
order\_approved\_at: "2018-07-26 03:24:27"  
order\_delivered\_carrier\_date: "2018-07-26 14:31:00"  
order\_delivered\_customer\_date: "2018-08-07 15:27:45"  
order\_estimated\_delivery\_date: "2018-08-13 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "53cdb2fc8bc7dcce0b6741e2150273451"  
customer\_id: "b0830fb4747ac6cd20deab8c802d7ef"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2018-07-24 20:41:37"  
order\_approved\_at: "2018-07-26 03:24:27"  
order\_delivered\_carrier\_date: "2018-07-26 14:31:00"  
order\_delivered\_customer\_date: "2018-08-07 15:27:45"  
order\_estimated\_delivery\_date: "2018-08-13 00:00:00"

\$addFields

Output after \$addFields stage (Sample of 20 documents)

```

1 {
2   FechaVenta: {
3     $dateFromString: {
4       $dateString: "$order_purchase_timestamp",
5       $format: "%Y-%m-%d %H:%M:%S"
6     }
7   }
8 }

```

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "e481f51c1bcd5467807c4c9136fd2d6af7"  
customer\_id: "9ef432eb6251297304e76186b10a928d"  
order\_status: "delivered"  
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order\_approved\_at: "2017-10-02 11:07:15"  
order\_delivered\_carrier\_date: "2017-10-10 19:55:00"  
order\_delivered\_customer\_date: "2017-10-10 21:25:13"  
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\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
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order\_estimated\_delivery\_date: "2018-08-13 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "53cdb2fc8bc7dcce0b6741e2150273451"  
customer\_id: "b0830fb4747ac6cd20deab8c802d7ef"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2018-07-24 20:41:37"  
order\_approved\_at: "2018-07-26 03:24:27"  
order\_delivered\_carrier\_date: "2018-07-26 14:31:00"  
order\_delivered\_customer\_date: "2018-08-07 15:27:45"  
order\_estimated\_delivery\_date: "2018-08-13 00:00:00"

\$addFields

Output after \$addFields stage (Sample of 20 documents)

> MongoSH Beta

Buscar cualquier cosa

07:38 p. m.  
06/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations

**frasgado.orders**

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION NUMERO\_VENTAS\_POR\_ANIO\_y\_MES SAVE

DOCUMENTS 99.4k TOTAL SIZE 38.2MB AVG. SIZE 403B INDEXES 1 TOTAL SIZE 916.0KB AVG. SIZE 916.0KB

SAMPLE MODE AUTO PREVIEW

99441 Documents in the Collection

Output after \$addFields stage (Sample of 20 documents)

```

1 /**
2  * newField: The new field name.
3  * expression: The new field expression.
4 */
5 {
6   anio: {
7     $year: "$FechaVenta"
8   },
9   mes: {
10    $month: "$FechaVenta"
11  }
12 }

```

order\_status: "delivered"  
order\_purchase\_timestamp: "2017-10-02 10:56:33"  
order\_approved\_at: "2017-10-02 11:07:15"  
order\_delivered\_carrier\_date: "2017-10-10 19:55:00"  
order\_delivered\_customer\_date: "2017-10-10 21:25:13"  
order\_estimated\_delivery\_date: "2017-10-10 20:00:00"  
FechaVenta: 2017-10-02T10:56:33.000+00:00  
anio: 2017  
mes: 10

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "53cdb2fc8bc7dcce0b6741e2150273451"  
customer\_id: "b0830fb4747ac6cd20deab8c802d7ef"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2018-07-24 20:41:37"  
order\_approved\_at: "2018-07-26 03:24:27"  
order\_delivered\_carrier\_date: "2018-07-26 14:31:00"  
order\_delivered\_customer\_date: "2018-08-07 15:27:45"  
order\_estimated\_delivery\_date: "2018-08-13 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "53cdb2fc8bc7dcce0b6741e2150273451"  
customer\_id: "b0830fb4747ac6cd20deab8c802d7ef"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2018-07-24 20:41:37"  
order\_approved\_at: "2018-07-26 03:24:27"  
order\_delivered\_carrier\_date: "2018-07-26 14:31:00"  
order\_delivered\_customer\_date: "2018-08-07 15:27:45"  
order\_estimated\_delivery\_date: "2018-08-13 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5b")  
order\_id: "53cdb2fc8bc7dcce0b6741e2150273451"  
customer\_id: "b0830fb4747ac6cd20deab8c802d7ef"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2018-07-24 20:41:37"  
order\_approved\_at: "2018-07-26 03:24:27"  
order\_delivered\_carrier\_date: "2018-07-26 14:31:00"  
order\_delivered\_customer\_date: "2018-08-07 15:27:45"  
order\_estimated\_delivery\_date: "2018-08-13 00:00:00"

\$group

Output after \$group stage (Sample of 20 documents)

```

1 /**
2  * _id: The id of the group.
3  * fieldN: The first field name.
4 */
5 {
6   _id: {
7     anio: "$anio",
8     mes: "$mes"
9   },
10  NoVentas: {
11    $sum: 1
12  }
13 }

```

\_id: Object  
NoVentas: 4026

\_id: Object  
NoVentas: 6512

\_id: Object  
NoVentas:

\$sort

Output after \$sort stage (Sample of 20 documents)

> MongoSH Beta

Buscar cualquier cosa

07:44 p. m.  
06/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS  FAVORITE

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enxu04-...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
> admin  
✓ frasgado  
2019-nCoV-cases-JHU  
CoV-cases  
customers  
directory  
geolocation  
h1n1  
items  
orders ...  
payments  
products  
reviews

frasgado.orders Aggregations

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION NUMERO\_VENTAS\_POR\_ANIO\_y\_MES SAVE

Output after \$sort stage (Sample of 20 documents)

```
1 /**
2  * Provide any number of field/order pairs.
3 */
4 {
5   anio: 1,
6   mes: 1
7 }
```

Output after \$addFields stage (Sample of 20 documents)

```
1 /**
2  * newfield: The new field name.
3  * expression: The new field expression.
4 */
5 {
6   byAnio: "$_id.anio",
7   byMonth: "$_id.mes",
8 }
```

Output after \$project stage (Sample of 20 documents)

```
1 /**
2  * specifications: The fields to
3  * include or exclude.
4 */
5 {
6   _id: 0,
7   byAnio: 1,
8   byMonth: 1,
9   NoVentas: 1
10 }
```

DOCUMENTS 99.4k TOTAL SIZE 38.2MB AVG. SIZE 403B INDEXES 1 TOTAL SIZE 916.0KB AVG. SIZE 916.0KB

SAMPLE MODE AUTO PREVIEW

07:45 p. m.  
06/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS  FAVORITE

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enxu04-...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
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2019-nCoV-cases-JHU  
CoV-cases  
customers  
directory  
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h1n1  
items  
orders ...  
payments  
products  
reviews

frasgado.orders Aggregations

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION NUMERO\_VENTAS\_POR\_ANIO\_y\_MES SAVE

Output after \$project stage (Sample of 20 documents)

```
1 /**
2  * specifications: The fields to
3  * include or exclude.
4 */
5 {
6   _id: 0,
7   byAnio: 1,
8   byMonth: 1,
9   NoVentas: 1
10 }
```

Output after \$sort stage (Sample of 20 documents)

```
1 /**
2  * Provide any number of field/order pairs.
3 */
4 {
5   byAnio: 1,
6   byMonth: 1
7 }
```

DOCUMENTS 99.4k TOTAL SIZE 38.2MB AVG. SIZE 403B INDEXES 1 TOTAL SIZE 916.0KB AVG. SIZE 916.0KB

SAMPLE MODE AUTO PREVIEW

07:45 p. m.  
06/12/2020

10 nuevas notificaciones

4. Obtener el detalle de artículos de cada venta realizada. El detalle debe mostrar detalles de los artículos y vendedor.

## MYSQL

```
select a.order_id, a.order_item_id, a.product_id, b.seller_id, a.price
```

```
from order_items a, sellers b
```

```
where
```

```
a.seller_id = b.seller_id
```

```
;
```

order_id	order_item_id	product_id	seller_id	price
00010242fe8c5a6d1ba2dd792cb16214	1	4244733e06e7eb4970a6e2683c13e61	4843dade18ac8b2bce089ec2a041202	58.9
00018f72f0320c557190d7a14bbd3	1	e5fd52b802189ee658865ca93d83a8f	df7dd0e4e1b6c2614352b383e fe2d36	239.9
00042b26cf59d7ca69dfabb4e55b4fd9	1	ac6c3623068f30de03045865e4e10089	df56039f3a51e74553ab94004ba5c57	199.9
0004cc3ae777c65dbb7da0e534c1ea	1	ef92d0fde845b84509d70c526e70f	6426d21ac49402a131f0a50d960a3c90	21.9
000576fe39319847cb5b5d288e5617a6	1	557d850972a766f792d18ae1400969a	5996cdcab893a4652b15992b59ab8db	810
00051a1728c9d785b6e2b08094576c	1	310aae3140f94b03219a040dc3c77fb	a18b6ba46a11724393025641d4ed5	145.95
0005f50442cb953dc1d021e1f923495	1	4539b0e1091c278ff193e5a1d3b39f	ba143b05f0110f0d71ad71b4466c92	53.99
00061f2a7b09d483e415a52d43a4af1	1	d6321011f499b976c35295b1c4bea	cc419e0650a3c5ba77189a182b7556a	59.99
00063b38a4240652a429470734ebd5	1	f17754e4e93259a5b282f24e33f65ab6	8602a61d680a10a82cceeda0d99ea3	45
000828aa423d2a3f00fc1b17cd7d8719	1	368c6c730842d78016ad23897a372db	1f50f920176fa1da6994f9023523100	49.9
000828aa423d2a3f00fc1b17cd7d8719	2	368c6c730842d78016ad23897a372db	1f50f920176fa1da6994f9023523100	49.9
0009c9a17916a706471784483a56643	1	3f27a9e699ff3d300e4e5d8c5c6b2	fcb5ace8bc9c2f75707d0f1a2d269	639
000ad2a75bad29dd57058c5a2ded	1	4fa33915031a8cd03d0d3e8bf27f01	fe2032dab1a61af879424b83196565c3	144
000e5628871f20f06475e0be559292e	1	5ed9easf534f6936b51d0b6c5e4d5c2e9	8dbae7e12377ed9cf1a8c7875207478	25
000e5338ae80bbcb5a30573b99628	1	553e0e75900d3116a072507a3635d2877	1c129092b2f23f2a5930387c980c0fc	47.9
000e906b789b55f64edcb1f84030f90d	1	57d799050de6d8897872c551bdf09358	ea8482cd71d3c1969d7b9473ff13abc	21.99
000f25fd472195062c40b12dc4e9a18a	1	1c05e0964302b6c56ba015f326e6ba	7c67e144b0f6e99d365ce6b010ab	119.99
001021f6aa8636c29475e7734483457d	1	5d7c23067ed0f3c8c6e9909373d59809	6560211a19b47992c3666cc44a7e940	49
001062e5201cc5f1ae7e9cc0ff5b0d00	1	5a49ebf248c871f86f522b51c69f61a	35040cd71d7f7a480967e0e4e94059d9	46.9
00119ff934e539cf26f92b9ef0cffed8	1	21b1c2f67a9aab5a0eb0b6c139bd8a	c864036feaabb8c1659f65ea4faebe1da	219.9

```
    {$lookup: {
```

```
      from: 'items',
```

```
      localField: 'order_id',
```

```
      foreignField: 'order_id',
```

```
      as: 'itemArr'
```

```
    }, {$lookup: {
```

```
      from: 'products',
```

```
      localField: 'itemArr.product_id',
```

```
      foreignField: 'product_id',
```

```
as: 'prdsArr'  
}, {$addFields: {  
    itemsObj : {  
        $arrayElemAt: [ "$itemArr", 0]  
    },  
    prodsObj : {  
        $arrayElemAt: [ "$prdsArr", 0]  
    },  
    NoProductos: {  
        $size: "$itemArr"  
    }  
  
}, {$addFields: {  
    categoriaProducto: "$prodsObj.product_category_name",  
    NoVendedor: "$itemsObj.seller_id"  
}}, {$project: {  
    order_id: 1,  
    order_purchase_timestamp: 1,  
    customer_id: 1,  
    NoVendedor: 1,  
    NoProductos: 1,  
    order_status: 1,  
    categoriaProducto: 1,  
    itemArr: 1  
}}, {$unwind: {  
    path: "$itemArr"  
}}]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations

**frasgado.orders**

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION OBTENER EL DETALLE DE CADA VENTA\_ITEMS Modified SAVE SAMPLE MODE AUTO PREVIEW

DOCUMENTS 99.4k TOTAL SIZE 38.2MB AVG. SIZE 403B INDEXES 1 TOTAL SIZE 916.0KB AVG. SIZE 916.0KB

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

Preview of Documents in the Collection

```
_id: ObjectId("5fc3e0eee1fba4dd4117a5a")
order_id: "e481f51bcd54678b7cc49136f2d6af7"
customer_id: "9ef432eb6251297304e76186b10a028d"
order_status: "delivered"
order_purchase_timestamp: "2017-10-02 10:56:33"
order_approved_at: "2017-10-02 11:07:15"
order_delivered_carrier_date: "2017-10-10 19:55:00"
order_delivered_customer_date: "2017-10-10 21:25:13"
order_estimated_delivery_date: "2017-10-10 20:00:00"
```

```
_id: ObjectId("5fc3e0eee1fba4dd4117a5b")
order_id: "53cd2fc8bc7dc0e0b6741e2150273451"
customer_id: "b083cf0f4747a6c6d20de0b8c802d7ef"
order_status: "delivered"
order_purchase_timestamp: "2018-07-24 20:41:37"
order_approved_at: "2018-07-26 03:24:27"
order_delivered_carrier_date: "2018-07-26 14:31:00"
order_delivered_customer_date: "2018-08-07 15:27:45"
order_estimated_delivery_date: "2018-08-07 15:27:45"
```

Output after \$lookup stage (Sample of 20 documents)

```
1 /**
2  * from: The target collection.
3  * LocalField: The local join field.
4  * foreignField: The target join field.
5  * as: The name for the results.
6  * pipeline: The pipeline to run on the joined collection.
7  * let: Optional variables to use in the pipeline if needed.
8 */
9 {
10  from: 'products',
11  localField: 'order_id',
12  foreignField: 'order_id',
13  as: 'itemArrn'
14 }
```

```
0: Object
_id: ObjectId("5fc4314ee1fba4dd4148bcb")
id: 101633
order_id: "e69fb5eb8e0ed6a785585b27e16dbf"
order_item_id: 1
product_id: "9a78fb9862b10749a117f7fc3c1f051"
seller_id: "7c67e1448b0f5e969d365ceab010ab"
shipping_limit_date: "11/08/17 12:05"
price: 149.99
freight_value: 19.77
```

```
itemArr: Array
0: Object
_id: ObjectId("5fc4314ee1fba4dd4148c27")
id: 101725
order_id: "e6ca15cb79ec1d90b1da9085a6118aeb"
order_item_id: 2
product_id: "88574b074924071f4e201e151b152b4e"
seller_id: "001ca7ae0ea17fb1caed9dfb1094831"
shipping_limit_date: "22/05/17 19:50"
price: 99
```

Output after \$lookup stage (Sample of 20 documents)

08:24 p. m. 06/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations

**frasgado.orders**

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION OBTENER EL DETALLE DE CADA VENTA\_ITEMS SAVE SAMPLE MODE AUTO PREVIEW

DOCUMENTS 99.4k TOTAL SIZE 38.2MB AVG. SIZE 403B INDEXES 1 TOTAL SIZE 916.0KB AVG. SIZE 916.0KB

Output after \$lookup stage (Sample of 20 documents)

```
_id: ObjectId("5fc3e0eee1fba4dd4117a5a")
order_id: "e481f51bcd54678b7cc49136f2d6af7"
customer_id: "9ef432eb6251297304e76186b10a028d"
order_status: "delivered"
order_purchase_timestamp: "2017-10-02 10:56:33"
order_approved_at: "2017-10-02 11:07:15"
order_delivered_carrier_date: "2017-10-10 19:55:00"
order_delivered_customer_date: "2017-10-10 21:25:13"
order_estimated_delivery_date: "2017-10-10 20:00:00"
itemArr: Array
```

```
_id: ObjectId("5fc3e0eee1fba4dd4117a5b")
order_id: "53cd2fc8bc7dc0e0b6741e2150273451"
customer_id: "b083cf0f4747a6c6d20de0b8c802d7ef"
order_status: "delivered"
order_purchase_timestamp: "2018-07-24 20:41:37"
order_approved_at: "2018-07-26 03:24:27"
order_delivered_carrier_date: "2018-07-26 14:31:00"
order_delivered_customer_date: "2018-08-07 15:27:45"
order_estimated_delivery_date: "2018-08-07 15:27:45"
```

Output after \$addFields stage (Sample of 20 documents)

```
1 /**
2  * newField: The new field name.
3  * expression: The new field expression.
4  */
5 {
6  itemObj: {
7    $arrayElemAt: [ "$itemArr", 0 ]
8  },
9  prodsObj: {
10   $arrayElemAt: [ "$prdsArr", 0 ]
11 },
12  NoProductos: {
13   $size: "$itemArr"
14 }
15,
16 }
```

```
_id: ObjectId("5fc3e0eee1fba4dd4117a5a")
order_id: "e481f51bcd54678b7cc49136f2d6af7"
customer_id: "9ef432eb6251297304e76186b10a028d"
order_status: "delivered"
order_purchase_timestamp: "2017-10-02 10:56:33"
order_approved_at: "2017-10-02 11:07:15"
order_delivered_carrier_date: "2017-10-10 19:55:00"
order_delivered_customer_date: "2017-10-10 21:25:13"
order_estimated_delivery_date: "2017-10-10 20:00:00"
itemArr: Array
prdsArr: Array
```

```
_id: ObjectId("5fc3e0eee1fba4dd4117a5b")
order_id: "53cd2fc8bc7dc0e0b6741e2150273451"
customer_id: "b083cf0f4747a6c6d20de0b8c802d7ef"
order_status: "delivered"
order_purchase_timestamp: "2018-07-24 20:41:37"
order_approved_at: "2018-07-26 03:24:27"
order_delivered_carrier_date: "2018-07-26 14:31:00"
order_delivered_customer_date: "2018-08-07 15:27:45"
order_estimated_delivery_date: "2018-08-07 15:27:45"
itemArr: Array
prdsArr: Array
```

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MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enu04...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
CoV-cases  
DETALLE\_VENTA  
customers  
directory  
geolocation  
h1n1  
items  
orders  
payments  
products  
reviews  
sellers  
users

frasgado.orders

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION OBTENER EL DETALLE DE CADA VENTA\_ITEMS SAVE

**\$addFields** SAMPLE MODE AUTO PREVIEW

Output after **\$addFields** stage (Sample of 20 documents)

```
1 /**
2  * newField: The new field name.
3  * expression: The new field expression.
4  */
5 {
6   categoriaProducto: "$prodsObj.product_category_name"
7   NoVendedor: "$itemsObj.seller_id"
8 }
```

**\$project**

Output after **\$project** stage (Sample of 20 documents)

```
1 /**
2  * specifications: The fields to
3  * include or exclude.
4  */
5 {
6   order_id: 1,
7   order_purchase_timestamp: 1,
8   customer_id: 1,
9   NoVendedor: 1,
10  NoProductos: 1,
11  orden_status: 1,
12  categoriaProducto: 1,
13  itemArr: 1
14 }
```

**\$unwind**

Output after **\$unwind** stage (Sample of 20 documents)

```
_id:ObjectId("5fc3e0eee1fba4dd4117a5a")
order_id:"e481f51cbd54678b7cc49136f2d6af7"
customer_id:"9ef432eb6251297304e76188b10a928d"
order_status:"delivered"
order_purchase_timestamp:"2017-10-02 10:56:33"
order_approved_at:"2017-10-02 11:07:15"
order_delivered_carrier_date:"2017-10-04 19:55:00"
order_delivered_customer_date:"2017-10-10 21:25:13"
orden_articulos_documento:"2017-10-10 19:55:00:00"
_id:ObjectId("5fc3e0eee1fba4dd4117a5b")
order_id:"53cb2fcabc7dc0e0b741e2150273451"
customer_id:"b0830fb4747a6c6d28de0b8c802d7ef"
order_status:"delivered"
order_purchase_timestamp:"2018-07-24 20:41:37"
order_approved_at:"2018-07-26 03:24:27"
order_delivered_carrier_date:"2018-07-26 14:31:00"
order_delivered_customer_date:"2018-08-07 15:27:45"
orden_articulos_documento:"2018-08-15 05:00:00"
_id:ObjectId("5fc3e0eee1fba4dd4117a5c")
order_id:"a481f51cbd54678b7cc49136f2d6af7"
customer_id:"9ef432eb6251297304e76188b10a928d"
order_status:"delivered"
order_purchase_timestamp:"2018-10-02 10:56:33"
itemArr:Array
NoProductos:1
categoriaProducto:"utilidades_domesticas"
NoVendedor:"3504c0cb71d7fa48d967e0e4c94d59d9"
```

06:53 a.m. 07/12/2020

## 5. Identificar aquellas órdenes de compras que tengan más de un artículo en el año 2017.

```
[$addFields: {
  FechaVenta: {
    $dateFromString: {
      dateString: '$order_purchase_timestamp',
      format: '%Y-%m-%d %H:%M:%S'
    }
  }
}, {$addFields: {
  anio: {
    $year: "$FechaVenta"
  }
}, {$match: {
  anio: { $eq: 2017}
```

```
}}, {$lookup: {
  from: 'items',
  localField: 'order_id',
  foreignField: 'order_id',
  as: 'itemArr'
}}, {$addFields: {
  NoProductos: {
    $size: "$itemArr"
  }
}}, {$match: {
  NoProductos: { $gt: 1},
}}, {$project: {
  order_id: 1,
  order_purchase_timestamp: 1,
  customer_id: 1,
  NoProductos: 1,
  order_status: 1,
  itemArr: 1
}}]
```

MongoDB Compass - cluster0.76phg.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS C

FAVORITE

HOSTS

cluster0-shard-00-01.76phg...  
cluster0-shard-00-00.76phg...  
cluster0-shard-00-02.76phg...

CLUSTER

Replica Set (atlas-enxu04-...  
3 Nodes

EDITION

MongoDB 4.2.11 Enterprise

Filter your data

CoV-cases

DETALLE\_VENTA

customers

directory

geolocation

h1n1

items

orders ...

payments

products

reviews

sellers

users

frasgado.orders

frasgado.orders Aggregations

frasgado.orders Aggregations

**frasgado.orders**

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION IDENTIFICAR-COMPRAS-MAYOR-DE-1-ARTICULO Modified SAVE

DOCUMENTS 99.4k TOTAL SIZE 38.2MB AVG. SIZE 403B INDEXES 1 TOTAL SIZE 916.0KB AVG. SIZE 916.0KB

99441 Documents in the Collection

Preview of Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

`_id: ObjectId("5fc3e0eee1fba4dd4117a5")  
order_id: "481f51c1bcd54678b7cc49136f2d6af7"  
customer_id: "0ef432eb625129730ae7616b010a928d"  
order_status: "delivered"  
order_purchase_timestamp: "2017-10-02 10:56:33"  
order_approved_at: "2017-10-02 11:07:15"  
order_delivered_carrier_date: "2017-10-04 19:55:00"  
order_delivered_customer_date: "2017-10-10 21:25:13"`

`_id: ObjectId("5fc3e0eee1fba4dd4117a5")  
order_id: "53cd2fc8bc7dc0e6741e215b273451"  
customer_id: "b0830fb4747a6c62de0e8c802d7ef"  
order_status: "delivered"  
order_purchase_timestamp: "2018-07-24 20:41:37"  
order_approved_at: "2018-07-26 03:24:27"  
order_delivered_carrier_date: "2018-07-26 14:31:00"  
order_delivered_customer_date: "2018-08-07 15:27:45"`

`_id: ObjectId("5fc3e0eee1fba4dd4117a5")  
order_id: "481f51c1bcd54678b7cc49136f2d6af7"  
customer_id: "0ef432eb625129730ae7616b010a928d"  
order_status: "delivered"  
order_purchase_timestamp: "2017-10-02 10:56:33"  
order_approved_at: "2017-10-02 11:07:15"  
order_delivered_carrier_date: "2017-10-04 19:55:00"  
order_delivered_customer_date: "2017-10-10 21:25:13"  
order_estimated_delivery_date: "2017-10-10 00:00:00"`

`_id: ObjectId("5fc3e0eee1fba4dd4117a5")  
order_id: "53cd2fc8bc7dc0e6741e215b273451"  
customer_id: "b0830fb4747a6c62de0e8c802d7ef"  
order_status: "delivered"  
order_purchase_timestamp: "2018-07-24 20:41:37"  
order_approved_at: "2018-07-26 03:24:27"  
order_delivered_carrier_date: "2018-07-26 14:31:00"  
order_delivered_customer_date: "2018-08-07 15:27:45"  
order_estimated_delivery_date: "2018-08-07 00:00:00"`

\$addFields

Output after \$addFields stage (Sample of 20 documents)

\$addFields

Output after \$addFields stage (Sample of 20 documents)

> MongoSH Beta

The screenshot shows the MongoDB Compass interface with three stages of an aggregation pipeline:

- \$addFields**: Adds a new field `anio` containing the value of `$year`.
- \$match**: Filters documents where `anio` is equal to 2017.
- \$lookup**: Looks up related documents from a collection named `frasgado.orders` based on the `customer_id` field.

The results for each stage are displayed as samples of 20 documents. The first document in each sample is shown in detail, followed by a list of 19 more documents.

```
Output after $addFields stage (Sample of 20 documents)
```

```
1 * {  
2   anio: {  
3     $year: "$FechaVenta"  
4   }  
5 }
```

```
_id: ObjectId("5fcf3e0eee1fba4dd4117a5a")  
order_id: "481f5f1cfd54679b7cc49136f2d6af7"  
customer_id: "9ef432eb6251297304e76186b10a928d"  
order_status: "delivered"  
order_purchase_timestamp: "2017-10-02 10:56:33"  
order_approved_at: "2017-10-02 11:07:15"  
order_delivered_carrier_date: "2017-10-04 19:55:00"  
order_delivered_customer_date: "2017-10-10 21:25:13"  
order_estimated_delivery_date: "2017-10-09 19:00:00-00:00"
```

```
Output after $match stage (Sample of 20 documents)
```

```
1 * {  
2   anio: { $eq: 2017 }  
3 }
```

```
_id: ObjectId("5fcf3e0eee1fba4dd4117a5b")  
order_id: "53cd2fcfc8d7c6b741e2150273451"  
customer_id: "98830fb4747a6c6d280de0a08c802d7ef"  
order_status: "delivered"  
order_purchase_timestamp: "2018-07-26 20:41:37"  
order_approved_at: "2018-07-26 03:24:27"  
order_delivered_carrier_date: "2018-07-26 14:31:00"  
order_delivered_customer_date: "2018-07-26 15:27:45"  
order_estimated_delivery_date: "2018-07-25 19:00:00-00:00"
```

```
Output after $lookup stage (Sample of 20 documents)
```

```
_id: ObjectId("5fcf3e0eee1fba4dd4117a5d")  
order_id: "a49d45b44df5de018fe0c16f97b45faa"  
customer_id: "f88197465ea7920adcdbec7375364d82"  
order_status: "delivered"  
order_purchase_timestamp: "2017-11-18 19:28:06"  
order_approved_at: "2017-11-18 19:45:59"  
order_delivered_carrier_date: "2017-11-22 13:39:50"  
order_delivered_customer_date: "2017-12-02 00:28:42"  
order_estimated_delivery_date: "2017-11-16 10:00:00-00:00"
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enu04...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
CoV-cases  
DETALLE\_VENTA  
customers  
directory  
geolocation  
h1n1  
items  
orders  
payments  
products  
reviews  
sellers  
users

frasgado.orders Aggregations

frasgado.orders Aggregations

frasgado.orders

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION IDENTIFICAR-COMPRAS-MAYOR-DE-1-ARTICULO Modified SAVE SAMPLE MODE AUTO PREVIEW

\$lookup

Output after \$lookup stage (Sample of 20 documents)

```
1: {  
  from: 'items',  
  localField: 'order_id',  
  foreignField: 'order_id',  
  as: 'itemArr'  
}
```

order\_status: "delivered"  
order\_purchase\_timestamp: "2017-10-02 10:56:33"  
order\_approved\_at: "2017-10-02 11:07:15"  
order\_delivered\_carrier\_date: "2017-10-04 19:55:00"  
order\_delivered\_customer\_date: "2017-10-10 21:25:13"  
order\_estimated\_delivery\_date: "2017-10-18 00:00:00"  
FechaVenta: "2017-10-02T10:56:33.000+00:00"  
anio: 2017  
itemArr: Array

\_id: ObjectId("5fc3e0eee1fba4dd4117a5d")  
order\_id: "949d5b44df5de91fe9c16f97b45f8a"  
customer\_id: "f88197465ea7920adcbe737536d82"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-11-18 19:28:06"  
order\_approved\_at: "2017-11-18 19:45:59"  
order\_delivered\_carrier\_date: "2017-11-22 13:39:59"  
order\_delivered\_customer\_date: "2017-12-02 00:28:42"  
order\_estimated\_delivery\_date: "2017-12-15 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5d")  
order\_id: "949d5b44df5de91fe9c16f97b45f8a"  
customer\_id: "f88197465ea7920adcbe737536d82"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-11-18 19:28:06"  
order\_approved\_at: "2017-11-18 19:45:59"  
order\_delivered\_carrier\_date: "2017-11-22 13:39:59"  
order\_delivered\_customer\_date: "2017-12-02 00:28:42"  
order\_estimated\_delivery\_date: "2017-12-15 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5d")  
order\_id: "949d5b44df5de91fe9c16f97b45f8a"  
customer\_id: "f88197465ea7920adcbe737536d82"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-11-18 19:28:06"  
order\_approved\_at: "2017-11-18 19:45:59"  
order\_delivered\_carrier\_date: "2017-11-22 13:39:59"  
order\_delivered\_customer\_date: "2017-12-02 00:28:42"  
order\_estimated\_delivery\_date: "2017-12-15 00:00:00"

\$addFields

Output after \$addFields stage (Sample of 20 documents)

```
1: {  
  NoProductos: {  
    $size: "$itemArr"  
  }  
}
```

\_id: ObjectId("5fc3e0eee1fba4dd4117a5d")  
order\_id: "e481f51bd54678b7c49136f2d6af7"  
customer\_id: "9ef432eb6251297304e76186b10a928d"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-10-02 10:56:33"  
order\_approved\_at: "2017-10-02 11:07:15"  
order\_delivered\_carrier\_date: "2017-10-04 19:55:00"  
order\_delivered\_customer\_date: "2017-10-10 21:25:13"  
order\_estimated\_delivery\_date: "2017-10-18 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a5d")  
order\_id: "e481f51bd54678b7c49136f2d6af7"  
customer\_id: "9ef432eb6251297304e76186b10a928d"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-11-18 19:28:06"  
order\_approved\_at: "2017-11-18 19:45:59"  
order\_delivered\_carrier\_date: "2017-11-22 13:39:59"  
order\_delivered\_customer\_date: "2017-12-02 00:28:42"  
order\_estimated\_delivery\_date: "2017-12-15 00:00:00"

\$match

Output after \$match stage (Sample of 20 documents)

```
1: {  
  NoProductos: {  
    $gt: 1,  
  }  
}
```

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "e6ce16c79ec1d90b1da9085a6118ae"  
customer\_id: "494dd4ed5b20131c64ed7f100595b95c"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-05-16 19:41:18"  
order\_approved\_at: "2017-05-16 19:50:18"  
order\_delivered\_carrier\_date: "2017-05-18 11:40:40"  
order\_delivered\_customer\_date: "2017-05-29 11:18:31"  
order\_estimated\_delivery\_date: "2017-06-07 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "e6ce16c79ec1d90b1da9085a6118ae"  
customer\_id: "494dd4ed5b20131c64ed7f100595b95c"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-05-16 19:41:18"  
order\_approved\_at: "2017-05-16 19:50:18"  
order\_delivered\_carrier\_date: "2017-05-18 11:40:40"  
order\_delivered\_customer\_date: "2017-05-29 11:18:31"  
order\_estimated\_delivery\_date: "2017-06-07 00:00:00"

\$project

Output after \$project stage (Sample of 20 documents)

```
1: /**  
 * specifications: The fields to  
 *                  include or exclude.  
 */  
5: {  
  6:   order_id: 1,  
  7:   order_purchase_timestamp: 1,  
  8:   customer_id: 1,  
  9:   NoProductos: 1,  
 10:  order_status: 1,  
 11:  itemArr: 1  
12: }
```

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "e6ce16c79ec1d90b1da9085a6118ae"  
customer\_id: "494dd4ed5b20131c64ed7f100595b95c"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-05-16 19:41:18"  
itemArr: Array  
NoProductos: 2

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "82ce2451c9148f8d19a559f70644"  
customer\_id: "388025bec8128ff20ec1a316ed4dcf02"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-04-20 17:15:46"  
itemArr: Array  
NoProductos: 5

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "82ce2451c9148f8d19a559f70644"  
customer\_id: "388025bec8128ff20ec1a316ed4dcf02"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-04-20 17:15:46"  
itemArr: Array  
NoProductos: 5

ADD STAGE

10:05 a.m.  
07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.orders

Connect View Collection Help

**Local**

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enu04...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
CoV-cases  
DETALLE\_VENTA  
customers  
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geolocation  
h1n1  
items  
orders  
payments  
products  
reviews  
sellers  
users

frasgado.orders Aggregations

frasgado.orders Aggregations

frasgado.orders

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION IDENTIFICAR-COMPRAS-MAYOR-DE-1-ARTICULO Modified SAVE SAMPLE MODE AUTO PREVIEW

\$match

Output after \$match stage (Sample of 20 documents)

```
1: {  
  NoProductos: {  
    $gt: 1,  
  }  
}
```

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "e6ce16c79ec1d90b1da9085a6118ae"  
customer\_id: "494dd4ed5b20131c64ed7f100595b95c"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-05-16 19:41:18"  
order\_approved\_at: "2017-05-16 19:50:18"  
order\_delivered\_carrier\_date: "2017-05-18 11:40:40"  
order\_delivered\_customer\_date: "2017-05-29 11:18:31"  
order\_estimated\_delivery\_date: "2017-06-07 00:00:00"

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "e6ce16c79ec1d90b1da9085a6118ae"  
customer\_id: "494dd4ed5b20131c64ed7f100595b95c"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-05-16 19:41:18"  
order\_approved\_at: "2017-05-16 19:50:18"  
order\_delivered\_carrier\_date: "2017-05-18 11:40:40"  
order\_delivered\_customer\_date: "2017-05-29 11:18:31"  
order\_estimated\_delivery\_date: "2017-06-07 00:00:00"

\$project

Output after \$project stage (Sample of 20 documents)

```
1: /**  
 * specifications: The fields to  
 *                  include or exclude.  
 */  
5: {  
  6:   order_id: 1,  
  7:   order_purchase_timestamp: 1,  
  8:   customer_id: 1,  
  9:   NoProductos: 1,  
 10:  order_status: 1,  
 11:  itemArr: 1  
12: }
```

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "e6ce16c79ec1d90b1da9085a6118ae"  
customer\_id: "494dd4ed5b20131c64ed7f100595b95c"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-05-16 19:41:18"  
itemArr: Array  
NoProductos: 2

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "82ce2451c9148f8d19a559f70644"  
customer\_id: "388025bec8128ff20ec1a316ed4dcf02"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-04-20 17:15:46"  
itemArr: Array  
NoProductos: 5

\_id: ObjectId("5fc3e0eee1fba4dd4117a64")  
order\_id: "82ce2451c9148f8d19a559f70644"  
customer\_id: "388025bec8128ff20ec1a316ed4dcf02"  
order\_status: "delivered"  
order\_purchase\_timestamp: "2017-04-20 17:15:46"  
itemArr: Array  
NoProductos: 5

ADD STAGE

10:05 a.m.  
07/12/2020

## 6. Obtener ranking de los tipos de pagos.

## MYSQL

```
select payment_type, count(*) as ranking  
from payments  
group by payment_type  
order by ranking desc;
```

The screenshot shows the MySQL Workbench interface with the following details:

- File Bar:** File, Edit, View, Query, Database, Server, Tools, Scripting, Help.
- Schemas:** frasdado (selected), session02\_07NOVIEMBRE2020, SESION03-14112020, 20-07-PROYECTO-SESION-03-...
- Query Editor:** SQL File 5\*, SQL File 6\*, orders, reviews, customers, sellers. The query is:

```
23  
24 • select payment_type, count(*) as ranking  
25 from payments  
26 group by payment_type  
27 order by ranking desc;  
28 |
```

- Result Grid:** Shows the results of the query:

payment_type	ranking
credit_card	76795
boleto	19784
voucher	5775
debit_card	1529
not_defined	3

- Output Panel:** Action Output table:

#	Time	Action	Message	Duration / Fetch
1	15:25:52	select payment_type, count(*) as ranking from payments group by payment_type order by ranking desc	5 row(s) returned	0.250 sec / 0.000 sec

- Taskbar:** Buscar cualquier cosa, and other application icons.

```
[{$group: {  
    _id: "$payment_type",  
    count: {  
        $sum: 1  
    }  
}, {$sort: {  
    count: -1  
}}]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.payments

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.payments Aggregations

### frasgado.payments

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION RANKING\_TIPOS\_PAGOS SAVE SAMPLE MODE AUTO PREVIEW

103.9k DOCUMENTS TOTAL SIZE 18.5MB AVG. SIZE 187B INDEXES 1 TOTAL SIZE 956.0KB AVG. SIZE 956.0KB

103886 Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

Preview of Documents in the Collection

```
_id: ObjectId("5fc3a8aee1fba4dd40fe48c")
payment_id: 1
order_id: "b81ef226f3fe1789b1e8b2acac839d17"
payment_sequential: 1
payment_type: "credit_card"
payment_installments: 8
payment_value: 99.33
```

```
_id: ObjectId("5fc3a8aee1fba4dd40fe48d")
payment_id: 2
order_id: "a9810da82917af2d9aef1d278f1dcfa0"
payment_sequential: 1
payment_type: "credit_card"
payment_installments: 1
payment_value: 24.39
```

```
_id: ObjectId("5fc3a8aee1fba4dd40fe48e")
payment_id: 3
order_id: "not_id"
payment_sequential: 1
payment_type: "boleto"
payment_installments: 1
payment_value: 3
```

\$group

```
1 /**
2 * _id: The id of the group.
3 * $field: The first field name.
4 */
5 {
6   "_id": "$payment_type",
7   "count": {
8     "$sum": 1
9   }
10 }
```

Output after \$group stage (Sample of 5 documents)

```
_id: "boleto"
count: 19025
```

```
_id: "voucher"
count: 5545
```

```
_id: "not_id"
count: 3
```

\$sort

```
1 /**
2 * Provide any number of field/order pairs.
3 */
4 {
5   "count": -1
6 }
```

Output after \$sort stage (Sample of 5 documents)

```
_id: "boleto"
count: 19025
```

```
_id: "voucher"
count: 5545
```

```
_id: "not_id"
count: 3
```

> MongoSH Beta

Buscar cualquier cosa

10:19 a.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.payments

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.payments Aggregations

### frasgado.payments

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION RANKING\_TIPOS\_PAGOS SAVE SAMPLE MODE AUTO PREVIEW

103.9k DOCUMENTS TOTAL SIZE 18.5MB AVG. SIZE 187B INDEXES 1 TOTAL SIZE 956.0KB AVG. SIZE 956.0KB

103886 Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

Preview of Documents in the Collection

```
_id: ObjectId("5fc3a8aee1fba4dd40fe48c")
payment_id: 1
order_id: "b81ef226f3fe1789b1e8b2acac839d17"
payment_sequential: 1
payment_type: "credit_card"
payment_installments: 8
payment_value: 99.33
```

```
_id: ObjectId("5fc3a8aee1fba4dd40fe48d")
payment_id: 2
order_id: "a9810da82917af2d9aef1d278f1dcfa0"
payment_sequential: 1
payment_type: "credit_card"
payment_installments: 1
payment_value: 24.39
```

```
_id: ObjectId("5fc3a8aee1fba4dd40fe48e")
payment_id: 3
order_id: "not_id"
payment_sequential: 1
payment_type: "boleto"
payment_installments: 1
payment_value: 3
```

\$group

```
1 /**
2 * _id: The id of the group.
3 * $field: The first field name.
4 */
5 {
6   "_id": "$payment_type",
7   "count": {
8     "$sum": 1
9   }
10 }
```

Output after \$group stage (Sample of 5 documents)

```
_id: "boleto"
count: 19025
```

```
_id: "voucher"
count: 5545
```

```
_id: "not_id"
count: 3
```

\$sort

```
1 /**
2 * Provide any number of field/order pairs.
3 */
4 {
5   "count": -1
6 }
```

Output after \$sort stage (Sample of 5 documents)

```
_id: "credit_card"
count: 73956
```

```
_id: "boleto"
count: 19025
```

```
_id: "voucher"
count: 5545
```

> MongoSH Beta

Buscar cualquier cosa

10:20 a.m. 07/12/2020

## 7. Obtener ranking de puntajes en las revisiones de órdenes de compra.

MYSQL

```

select review_score, count(*) as ranking
from reviews
group by review_score
order by ranking desc;

```

The screenshot shows the MySQL Workbench interface with the following details:

- Query Editor:** Displays the SQL query:

```

23
24 • select review_score, count(*) as ranking
25   from reviews
26   group by review_score
27   order by ranking desc;
28

```
- Result Grid:** Shows the output of the query:

review_score	ranking
5	12115
4	4048
1	2483
3	1735
2	701
- Output Panel:** Shows the completed query log:

#	Time	Action	Message	Duration / Fetch
1	15:25:52	select payment_type, count(*) as ranking from payments group by payment_type order by ranking desc	5 row(s) returned	0.250 sec / 0.000 sec
2	15:27:21	select review_score, count(*) as ranking from reviews group by review_score order by ranking desc	5 row(s) returned	0.203 sec / 0.000 sec

## MONGODB

```

[{$group: {
  _id:"$review_score",
  ranking: {
    $sum: 1
  }
}}, {$sort: {
  ranking: -1
}]]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.reviews Aggregations

### frasgado.reviews

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION RANKING\_GENERAL SAVE

100000 Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

Preview of Documents in the Collection

100000 Documents in the Collection

100.0k DOCUMENTS TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

**Aggregation Pipeline Stages:**

- \$group** (Sample of 5 documents)

```

1 [
2   {
3     "_id": "$review_score",
4     "ranking": {
5       "$sum": 1
6     }
7   }
8 ]
  
```

Output after **\$group** stage (Sample of 5 documents)

<code>_id: 5 ranking: 57420</code>	<code>_id: 2 ranking: 3235</code>	<code>_id: 1 ranking: 1</code>
--	---------------------------------------	------------------------------------

**\$sort** (Sample of 5 documents)

Output after **\$sort** stage (Sample of 5 documents)

<code>_id: 5 ranking: 57420</code>	<code>_id: 2 ranking: 3235</code>	<code>_id: 1 ranking: 1</code>
--	---------------------------------------	------------------------------------

SAMPLE MODE AUTO PREVIEW

> MongoSH Beta

Buscar cualquier cosa

11:18 a.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.reviews Aggregations

### frasgado.reviews

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION RANKING\_GENERAL SAVE

100.0k DOCUMENTS TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

**Aggregation Pipeline Stages:**

- \$group** (Sample of 5 documents)

```

1 [
2   {
3     "_id": "$review_score",
4     "ranking": {
5       "$sum": 1
6     }
7   }
8 ]
  
```

Output after **\$group** stage (Sample of 5 documents)

<code>_id: 5 ranking: 57420</code>	<code>_id: 2 ranking: 3235</code>	<code>_id: 1 ranking: 1</code>
--	---------------------------------------	------------------------------------

**\$sort** (Sample of 5 documents)

Output after **\$sort** stage (Sample of 5 documents)

<code>_id: 5 ranking: 57420</code>	<code>_id: 4 ranking: 19200</code>	<code>_id: 1 ranking: 1</code>
--	--	------------------------------------

SAMPLE MODE AUTO PREVIEW

> MongoSH Beta

Buscar cualquier cosa

11:18 a.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

Local

frasgado.orders Aggregations frasgado.reviews Aggregations

**frasgado.reviews**

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION RANKING\_GENERAL SAVE

Output after \$group stage (Sample of 5 documents)

```
1 * {
  2   _id:"$review_score",
  3   ranking: {
  4     $sum: 1
  5   }
  6 }
```

\_id: 5 ranking: 57420

\_id: 2 ranking: 3235

\_id: 1 ranking: 1

Output after \$sort stage (Sample of 5 documents)

```
1 * /**
  2   * Provide any number of field/order pairs.
  3   */
  4 * {
  5   ranking: -1
  6 }
```

\_id: 1 ranking: 11858

\_id: 3 ranking: 8287

\_id: 2 ranking: 3235

ADD STAGE

## 8. Obtener ranking de puntajes por año y mes.

MYSQL

```
select review_score,
year(str_to_date(review_creation_date, '%d/%m/%Y')) as anio,
month(str_to_date(review_creation_date, '%d/%m/%Y')) as mes,
count(*) as ranking
from reviews
group by review_score, anio, mes
order by anio desc, mes asc, ranking desc;
```

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator: session02\_07NOVIEMBRE2020 SESION03-14112020 20-07-PROYECTO-SESION-03... SQL File 5\* SQL File 6\* orders reviews customers sellers SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

**SCHEMAS**

- Triggers
- orders
- payments
- products
- ratings
- reviews

**Columns**

- review\_id
- order\_id
- review\_score
- review\_comment\_title
- review\_comment\_message
- review\_creation\_date
- review\_answer\_timestamp

**Indexes**

Administration Schemas Information

**Column:** review\_creation\_date  
**Collation:** utf8mb4\_0900\_ai\_ci  
**Definition:** review\_creation\_date text

**Result Grid**

review_score	año	mes	ranking
5	2018	1	754
4	2018	1	231
1	2018	1	149
3	2018	1	118
2	2018	1	40
5	2018	2	736
4	2018	2	259
1	2018	2	169
3	2018	2	135
2	2018	2	41
5	2018	3	821
1	2018	3	316
4	2018	3	304
3	2018	3	155
2	2018	3	68
5	2018	4	811

Result 29 x

**Output**

#	Time	Action	Message	Duration / Fetch
5	15:30:57	select review_creation_date from reviews	21082 row(s) returned	0.171 sec / 0.516 sec
6	15:30:57	select review_score, year(str_to_date(review_creation_date, '%d/%m/%Y')) as año, month(str_to_date(review_creation_date, '%d/%m/%Y')) as mes from reviews	Error Code: 1054. Unknown column 'month' in 'group statement'	0.078 sec
7	15:31:15	select review_score, year(str_to_date(review_creation_date, '%d/%m/%Y')) as año, month(str_to_date(review_creation_date, '%d/%m/%Y')) as mes from reviews	109 row(s) returned	0.282 sec / 0.000 sec

Object Info Session

Query Completed

Buscar cualquier cosa 03:31 p. m. 07/12/2020

## MONGODB

```

[{$lookup: {
  from: 'orders',
  localField: 'order_id',
  foreignField: 'order_id',
  as: 'ordArr'
}}, {$addFields: {
  ordObj: {
    $arrayElemAt: [ "$ordArr", 0]
  }
}}, {$addFields: {
  FechaVenta: {
    $dateFromString: {
      dateString: '$ordObj.order_purchase_timestamp',
      format: '%Y-%m-%d %H:%M:%S'
    }
  }
}}
  
```

```

    }}, {$addFields: {
        anio: {
            $year: "$FechaVenta"
        }
    }},
    {$group: {
        _id: {
            anio: "$anio",
            review_score: "$review_score"
        },
        count: {
            $sum: 1
        }
    }}
}}
```

The screenshot shows the MongoDB Compass interface with the following details:

- Hosts:** cluster0-shard-00-02:7089, cluster0-shard-00-01:7090, cluster0-shard-00-00:7099.
- Collection:** frasgado.reviews
- Aggregations Tab:** The pipeline consists of three stages:
  - \$addFields:** Adds a new field `anio` by extracting the year from the `FechaVenta` timestamp.
  - \$group:** Groups documents by the year and reviews score, summing the count of documents for each group.
- Output:** The final output shows five groups of documents:
  - Group 1 (Year 2018, Score 5): Count 1
  - Group 2 (Year 2018, Score 4): Count 1
  - Group 3 (Year 2018, Score 3): Count 1
  - Group 4 (Year 2018, Score 2): Count 1
  - Group 5 (Year 2018, Score 1): Count 1

## 9. ¿Cuántos vendedores existen por ciudad y estado?

```

[{$group: {
        _id: {

```

```

    seller_state: "$seller_state",
    seller_city: "$seller_city"
},
numVendedores: { $sum: 1 }

}}, {$addFields: {
    Ciudad: "$_id.seller_city",
    Estado: "$_id.seller_state"
}},
{$sort: {
    numVendedores: -1
}},
{$project: {
    _id: 0,
    Ciudad: 1,
    Estado: 1,
    numVendedores: 1
}}]

```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.sellers

Local frasgado.orders frasgado.sellers Aggregations

**frasgado.sellers**

Documents Aggregations Schema Explain Plan Indexes Validation

3.095 DOCUMENTS 3.1k TOTAL SIZE 462.9KB AVG. SIZE 153B INDEXES 1 TOTAL SIZE 56.0KB AVG. SIZE 56.0KB

3095 Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

Preview of Documents in the Collection

Output after \$group stage (Sample of 20 documents)

Output after \$addFields stage (Sample of 20 documents)

11:30 a.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.sellers

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.sellers Aggregations

### frasgado.sellers

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION VENDEDORES POR ESTADO SAVE SAMPLE MODE AUTO PREVIEW

**\$addFields**

```
1 /**
2  * newField: The new field name.
3  * expression: The new field expression.
4 */
5 * {
6   Ciudad: "$_id.seller_city",
7   Estado: "$_id.seller_state"
8 }
```

Output after \$addFields stage (Sample of 20 documents)

```
_id:Object
numVendedores:2
Ciudad:"natal"
Estado:"RN"
```

**\$sort**

```
1 /**
2  * Provide any number of field/order pairs.
3 */
4 * {
5   numVendedores: -1
6 }
```

Output after \$sort stage (Sample of 20 documents)

```
_id:Object
numVendedores:694
Ciudad:"sao paulo"
Estado:"SP"
```

**\$project**

```
1 /**
2  * specifications: The fields to
3  * + include or exclude.
4 */
5 * {
6   _id: 0,
7   Ciudad: 1,
8   Estado: 1,
9   numVendedores: 1
10 }
```

Output after \$project stage (Sample of 20 documents)

```
numVendedores:694
Ciudad:"sao paulo"
Estado:"SP"
```

DOCUMENTS 3.1k TOTAL SIZE 462.9KB AVG. SIZE 153B INDEXES 1 TOTAL SIZE 56.0KB AVG. SIZE 56.0KB

11:31 a.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.sellers

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.sellers Aggregations

### frasgado.sellers

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION VENDEDORES POR ESTADO SAVE SAMPLE MODE AUTO PREVIEW

**\$sort**

```
1 /**
2  * Provide any number of field/order pairs.
3 */
4 * {
5   numVendedores: -1
6 }
```

Output after \$sort stage (Sample of 20 documents)

```
_id:Object
numVendedores:694
Ciudad:"sao paulo"
Estado:"SP"
```

**\$project**

```
1 /**
2  * specifications: The fields to
3  * + include or exclude.
4 */
5 * {
6   _id: 0,
7   Ciudad: 1,
8   Estado: 1,
9   numVendedores: 1
10 }
```

Output after \$project stage (Sample of 20 documents)

```
numVendedores:694
Ciudad:"sao paulo"
Estado:"SP"
```

DOCUMENTS 3.1k TOTAL SIZE 462.9KB AVG. SIZE 153B INDEXES 1 TOTAL SIZE 56.0KB AVG. SIZE 56.0KB

11:31 a.m. 07/12/2020

## 10. ¿Cuántos clientes existen por Ciudad y Estado?

```
[{$group: {  
    _id: {  
        customer_city: "$customer_city",  
        customer_state: "$customer_state"  
    },  
    numClientes: {  
        $sum: 1  
    }  
}}, {$addFields: {  
    Ciudad: "$_id.customer_city",  
    Estado: "$_id.customer_state"  
}}, {$sort: {  
    numClientes: -1  
}}, {$project: {  
    _id: 0,  
    Ciudad: 1,  
    Estado: 1,  
    numClientes: 1  
}}]  
}]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.customers

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

**frasgado.orders Aggregations** frasgado.sellers Aggregations **frasgado.customers Aggregations**

**frasgado.customers**

DOCUMENTS 99.4k TOTAL SIZE 20.7MB 218B INDEXES 1 TOTAL SIZE 896.0KB 896.0KB

Documents Aggregations Schema Explain Plan Indexes Validation

**COLLATION CLIENTES\_POR\_CIUDAD\_Y\_ESTADO** SAVE SAMPLE MODE AUTO PREVIEW

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

**\$group** Output after \$group stage (Sample of 20 documents)

```

1 /**
2 * _id: The id of the group.
3 * $field: The first field name.
4 */
5 {
6   _id: {
7     customer_city: "$customer_city",
8     customer_state: "$customer_state"
9   },
10   numClientes: {
11     $sum: 1
12   }
13 }

```

**\$addFields** Output after \$addFields stage (Sample of 20 documents)

```

1 /**
2 * newField: The new field name.
3 * expression: The new field expression.
4 */
5 {
6   Ciudad: "$_id.customer_city",
7   Estado: "$_id.customer_state"
8 }

```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.customers

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

**frasgado.orders Aggregations** frasgado.sellers Aggregations **frasgado.customers Aggregations**

**frasgado.customers**

DOCUMENTS 99.4k TOTAL SIZE 20.7MB 218B INDEXES 1 TOTAL SIZE 896.0KB 896.0KB

Documents Aggregations Schema Explain Plan Indexes Validation

**COLLATION CLIENTES\_POR\_CIUDAD\_Y\_ESTADO** SAVE SAMPLE MODE AUTO PREVIEW

**\$addFields** Output after \$addFields stage (Sample of 20 documents)

```

1 /**
2 * newField: The new field name.
3 * expression: The new field expression.
4 */
5 {
6   Ciudad: "$_id.customer_city",
7   Estado: "$_id.customer_state"
8 }

```

**\$sort** Output after \$sort stage (Sample of 20 documents)

```

1 /**
2 * Provide any number of field/order pairs.
3 */
4 {
5   numClientes: -1
6 }

```

**\$project** Output after \$project stage (Sample of 20 documents)

```

1 /**
2 * Provide any number of field/expression pairs.
3 */
4 {
5   Ciudad: "$Ciudad"
6   Estado: "$Estado"
7   numClientes: "$numClientes"
8 }

```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.customers

Connect View Collection Help

Local

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.sellers Aggregations frasgado.customers Aggregations

frasgado.customers

DOCUMENTS 99.4k TOTAL SIZE 20.7MB AVG. SIZE 218B INDEXES 1 TOTAL SIZE 896.0KB AVG. SIZE 896.0KB

Aggregations

COLLATION CLIENTES\_POR\_CIUDAD\_Y\_ESTADO SAVE SAMPLE MODE AUTO PREVIEW

\$sort

```
1 /**
2  * Provide any number of field/order pairs.
3  */
4 {
5     numClientes: -1
6 }
```

Output after \$sort stage (Sample of 20 documents)

```
_id:Object
numClientes:15540
Ciudad:"sao paulo"
Estado:"SP"
```

```
_id:Object
numClientes:6882
Ciudad:"rio de janeiro"
Estado:"RJ"
```

```
_id:Object
numClientes:15540
Ciudad:"sao paulo"
Estado:"SP"
```

\$project

```
1 /**
2  * specifications: The fields to
3  * include or exclude.
4 */
5 {
6     _id: 0,
7     Ciudad: 1,
8     Estado: 1,
9     numClientes: 1
10 }
```

Output after \$project stage (Sample of 20 documents)

```
numClientes:15540
Ciudad:"sao paulo"
Estado:"SP"
```

```
numClientes:6882
Ciudad:"rio de janeiro"
Estado:"RJ"
```

```
numClientes:15540
Ciudad:"sao paulo"
Estado:"SP"
```

ADD STAGE

Filter your data

2019-nCoV-cases-JHU  
CoV-cases  
DETALLE\_VENTA  
VENDEDORES ESTA...  
customers  
directory  
geolocation  
h1n1  
items  
orders  
payments  
products  
reviews

MongoSH Beta

Buscar cualquier cosa

11:39 a. m. 07/12/2020

## 11. Identificar los números de órdenes que no fueron entregados.

```
[{$match: {
    "review_comment_message": {
        $in: [/PRODUTO NAO ENTREGUE/i]
    }
}]]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.sellers Aggregations frasgado.customers Aggregations frasgado.reviews Aggregations frasgado.reviews Aggregations

**frasgado.reviews**

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

Documents Aggregations Schema Explain Plan Indexes Validation SAMPLE MODE AUTO PREVIEW

COLLATION PRODUCTOS\_NO\_ENTREGADOS SAVE

100000 Documents in the Collection Preview of Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d5")  
 id: 1  
 review\_id: "7bc2406110b926393aa56f88a40eba40"  
 order\_id: "73fc7af87114b39712e6da79b0a377eb"  
 review\_score: 4  
 review\_comment\_title: ""  
 review\_comment\_message: ""  
 review\_creation\_date: "18/01/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d6")  
 id: 2  
 review\_id: "80e641a11e56f04c1ad469d5645fdde"  
 order\_id: "a548910a1c614779b98fdf73dheba33"  
 review\_score: 5  
 review\_comment\_title: ""  
 review\_comment\_message: ""  
 review\_creation\_date: "10/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d7")  
 id: 3  
 review\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 order\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d8")  
 id: 4  
 review\_id: "81a57c09af35f9736f760b6ae16a118"  
 order\_id: "167d05678f810589a854d30460ae62f0"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d9")  
 id: 5  
 review\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 order\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d0")  
 id: 6  
 review\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 order\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d1")  
 id: 7  
 review\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 order\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d2")  
 id: 8  
 review\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 order\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d3")  
 id: 9  
 review\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 order\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

\_id: ObjectId("5fcba43f1ee1fbba4dd414b6d4")  
 id: 10  
 review\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 order\_id: "88743d1ed8e7b6ca01e12830855cdca2"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"

Output after \$match stage (Sample of 10 documents)

ADD STAGE

A partir de la vista generada para pedidos que no fueron entregados, identificar la cantidad de órdenes.

```
[{$group: {
  _id: null,
  totalOrdenesSinEntregar: {
    $sum: 1
  }
}}]
```

The screenshot shows the MongoDB Compass interface with the following details:

- Left Sidebar:** Shows the local cluster with 3 DBs and 19 collections. Collections listed include: cluster0-shard-00-01.76pg..., cluster0-shard-00-00.76pg..., cluster0-shard-00-02.76pg..., REPLICA SET (atlas-enu04-3 Nodes), and various frasgado.\* collections.
- Top Bar:** Shows tabs for frasgado.orders Aggregations, frasgado.sellers Aggregations, frasgado.customers Aggregations, frasgado.reviews Aggregations, and frasgado.No\_DE\_ORDENES\_NO\_ENTREGADOS Aggregations.
- Middle Area:**
  - Aggregation Pipeline:** The current pipeline stage is \$group. The stage definition is:

```
1 //**
2 *   _id: The id of the group.
3 *   field: The first field name.
4 */
5 * {
6     _id: null,
7     totalOrdenesSinEntregar: {
8         $sum: 1
9     }
10 }
```
  - Preview of Documents:** Shows 10 documents from the collection. One document is expanded to show fields like \_id, review\_id, order\_id, review\_score, review\_comment\_title, review\_comment\_message, review\_creation\_date, and review\_update\_date.
  - Output after Stage:** Shows the output of the \$group stage, which is a single document with \_id: null and totalOrdenesSinEntregar: 10.
- Bottom Bar:** Shows the Windows taskbar with various pinned icons and the system clock indicating 12:01 p.m. on 07/12/2020.

## 12. Identificar los números de órdenes que cumplan con las siguientes características:

- Que no se hayan entregado, recibido o conferido por el cliente.
  - NAO ENTREGUE,
  - Nao recebi,
  - nao confere
- En el primer semestre del 2018.

```
[{$match: {
```

```
  "review_comment_message": {
```

```
    $in: [/NAO ENTREGUE/i,
```

```
    /Nao recebi/,
```

```
    /nao confere/
```

```
]
```

```
}
```

```
}, {$addFields: {
```

```
  fechaRegistro: {
```

```
    $dateFromString: {
```

```
      dateString: '$review_creation_date',
```

```
      format: '%d/%m/%Y %H:%M'
```

```
    }
}

}}, {$addFields: {
  anio: {
    $year: "$fechaRegistro"
  },
  mes: {
    $month: "$fechaRegistro"
  }
}

}}, {$match: {
  anio: { $eq: 18 },
  mes: { $gte: 1},
  mes: { $lte: 6 }

}}, {$sort: {
  mes: 1
}}]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enu04-...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
No\_DE\_ORDENES\_N...  
VENDEDORES\_ESTA...  
customers  
directory  
geolocation  
h1n1  
items  
orders  
payments  
products  
reviews  
sellers  
users

frasgado.orders Aggregations  
frasgado.sellers Aggregations  
frasgado.customers Aggregations  
frasgado.reviews Aggregations  
frasgado.reviews Aggregations

Aggregations

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

COLLATION PRODUCTOS\_NO\_ENTREGADOS\_2018\_1erSemestre\_Modified SAVE SAMPLE MODE AUTO PREVIEW

100000 Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

Preview of Documents in the Collection

\_id: ObjectId("5fcba43beef1fba4dd414b6d5")  
id: 1  
review\_id: "7bc2406110b926393aa56f80a40eba40"  
order\_id: "73fc7af8711d39712e6da79b0a377eb"  
review\_score: 4  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/01/18 0:00"

\_id: ObjectId("5fcba43beef1fba4dd414b6d6")  
id: 2  
review\_id: "80e641a11e56f04c1ad469d5645fdfe"  
order\_id: "a548910a1c6147796b98fd73dbeba33"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "10/03/18 0:00"

\_id: ObjectId("5fcba43beef1fba4dd414b6d7")  
id: 3  
review\_id: "80e641a11e56f04c1ad469d5645fdfe"  
order\_id: "a548910a1c6147796b98fd73dbeba33"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "10/03/18 0:00"

\$match

Output after \$match stage (Sample of 84 documents)

```
1 /**
2  * query: The query in MQL.
3  */
4 {
5   "review_comment_message": {
6     "$in": ["NAO ENTREGUEI/", "Nao recebi/", "nao confere/"]
7   }
8 }
```

10 /\*\*
11 \* review\_id: "f686a8327d7a09bed9fca394f6cac"
12 \* order\_id: "9edba6f61c4fa2251abdc8640b8cc1"
13 \* review\_score: 1
14 \* review\_comment\_title: ""
15 \* review\_comment\_message: "Nao recebi meu produto em casa Paguei frete, e tive que retira"
16 \* review\_creation\_date: "14/03/18 0:00"
17 \* review\_answer\_timestamp: "15/03/18 14:55"

\_id: ObjectId("5fcba43beef1fba4dd414b6d8")  
id: 88656  
review\_id: "686edd45d80abb623cf146881941935"  
order\_id: "a3fce7272ad453e9df1d3b9fb874ba3b"  
review\_score: 1  
review\_comment\_title: ""  
review\_comment\_message: "Nao recebi ainda o produto"  
review\_creation\_date: "10/08/17 0:00"  
review\_answer\_timestamp: "10/08/17 17:33:53"

\$addFields

Output after \$addFields stage (Sample of 84 documents)

> MongoSH Beta

Buscar cualquier cosa

12:36 p. m.  
07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enu04-...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
No\_DE\_ORDENES\_N...  
VENDEDORES\_ESTA...  
customers  
directory  
geolocation  
h1n1  
items  
orders  
payments  
products  
reviews  
sellers  
users

frasgado.orders Aggregations  
frasgado.sellers Aggregations  
frasgado.customers Aggregations  
frasgado.reviews Aggregations  
frasgado.reviews Aggregations

Aggregations

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

COLLATION PRODUCTOS\_NO\_ENTREGADOS\_2018\_1erSemestre\_Modified SAVE SAMPLE MODE AUTO PREVIEW

Output after \$addFields stage (Sample of 84 documents)

```
1 /**
2  * newfield: The new field name.
3  * expression: The new field expression.
4  */
5 {
6   "FechaRegistro": {
7     "$dateFromString": {
8       "dateString": "$review_creation_date",
9       "format": "%d/%m/%Y %H:%M"
10    }
11  }
12 }
```

10 /\*\*
11 \* review\_id: "81a57c09af35f9736f760b6ae16af118"
12 \* order\_id: "16705678f810589a854d30460ae62f0"
13 \* review\_score: 1
14 \* review\_comment\_title: ""
15 \* review\_comment\_message: "Demora, produto nao entregue!"  
review\_creation\_date: "07/03/18 0:00"  
review\_answer\_timestamp: "07/03/18 15:26"  
fechaRegistro: 0018-03-07T00:00:00.000+00:00

10 /\*\*
11 \* review\_id: "c8742102a4b11642f51cd203b4836c6b"
12 \* order\_id: "8bcbb4c1ca645d109ed37389fdasdbb"
13 \* review\_score: 1
14 \* review\_comment\_title: ""
15 \* review\_comment\_message: "Nao recebi o produto."  
review\_creation\_date: "23/09/17 0:00"  
review\_answer\_timestamp: "26/09/17 1:00"  
fechaRegistro: 0017-09-23T00:00:00.000+00:00

\_id: ObjectId("5fcba43f1ee1fba4dd414b75")  
id: 1953  
review\_id: "81a57c09af35f9736f760b6ae16af118"  
order\_id: "16705678f810589a854d30460ae62f0"  
review\_score: 1  
review\_comment\_title: ""  
review\_comment\_message: "Demora, produto nao entregue!"  
review\_creation\_date: "07/03/18 0:00"  
review\_answer\_timestamp: "07/03/18 15:26"

\_id: ObjectId("5fcba43f9ee1fba4dd414c591")  
id: 3773  
review\_id: "c8742102a4b11642f51cd203b4836c6b"  
order\_id: "8bcbb4c1ca645d109ed37389fdasdbb"  
review\_score: 1  
review\_comment\_title: ""  
review\_comment\_message: "Nao recebi o produto."  
review\_creation\_date: "23/09/17 0:00"  
review\_answer\_timestamp: "16/09/17 1:00"

\_id: ObjectId("5fcba43f9ee1fba4dd414c592")  
id: 7373  
review\_id: "c8742102a4b11642f51cd203b4836c6b"  
order\_id: "8bcbb4c1ca645d109ed37389fdasdbb"  
review\_score: 1  
review\_comment\_title: ""  
review\_comment\_message: "Nao recebi o produto."  
review\_creation\_date: "23/09/17 0:00"  
review\_answer\_timestamp: "16/09/17 1:00"

\$addFields

Output after \$addFields stage (Sample of 84 documents)

\$match

Output after \$match stage (Sample of 45 documents)

> MongoSH Beta

Buscar cualquier cosa

12:36 p. m.  
07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

Local

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.sellers Aggregations frasgado.customers Aggregations frasgado.reviews Aggregations frasgado.reviews Aggregations

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

Aggregations

Documents Schema Explain Plan Indexes Validation SAMPLE MODE AUTO PREVIEW

**frasgado.reviews**

COLLATION PRODUCTOS\_NO\_ENTREGADOS\_2018\_1erSemestre\_Modified SAVE

\$match Output after \$match stage (Sample of 45 documents)

```
1 /**
2 * query: The query in MQL.
3 */
4 {
5   anio: { $eq: 18 },
6   mes: { $gte: 1 },
7   mes: { $lte: 6 }
8
9
10 }
```

\_id: ObjectId("5fcba441bee1fba4dd414e019")  
 id: 10565  
 review\_id: "d9f94b52ca4d5bf79588f6262bfaad4"  
 order\_id: "0fc2805c054f060fb9b7db454927b5b24"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Demora, produto nao entregue!"  
 review\_creation\_date: "07/03/18 0:00"  
 review\_answer\_timestamp: "07/03/18 15:26"  
 fechaRegistro: 2018-03-07T00:00:00.000+00:00  
 anio: 18  
 mes: 3

\_id: Objec  
 id: 14393  
 review\_id:  
 order\_id:  
 review\_scc:  
 review\_crr:  
 review\_cry:  
 review\_anr:

**\$sort** Output after \$sort stage (Sample of 45 documents)

```
1 /**
2 * Provide any number of field/order pairs.
3 */
4 {
5   mes: 1
6 }
```

\_id: ObjectId("5fcba441bee1fba4dd414e019")  
 id: 10565  
 review\_id: "d9f94b52ca4d5bf79588f6262bfaad4"  
 order\_id: "0fc2805c054f060fb9b7db454927b5b24"  
 review\_score: 1  
 review\_comment\_title: ""  
 review\_comment\_message: "Nao recebi nem o produto nem o comprovante de compra."  
 review\_creation\_date: "31/01/18 0:00"  
 review\_answer\_timestamp: "31/01/18 23:48"  
 fechaRegistro: 2018-01-31T00:00:00.000+00:00  
 anio: 18  
 mes: 1

\_id: Objec  
 id: 53200  
 review\_id:  
 order\_id:  
 review\_scc:  
 review\_crr:  
 review\_cry:  
 review\_anr:

ADD STAGE

> MongoSH Beta

Buscar cualquier cosa

12:37 p. m. 07/12/2020

13. Obtener el número de artículos vendidos por número de orden y fecha.

```
[{$lookup: {
  from: 'orders',
  localField: 'order_id',
  foreignField: 'order_id',
  as: 'ordArr'
}}, {$addFields: {
  orderObj: {
    $arrayElemAt: [
      '$ordArr',
      0
    ]
  }
}}, {$addFields: {
  fechaCompra: '$orderObj.order_purchase_timestamp'
}}, {$addFields: {
  FechaVenta: {
    $dateToString: {
      format: "%Y-%m-%d"
    }
  }
}}]
```

```
$dateFromString: {  
    dateString: '$fechaCompra',  
    format: '%Y-%m-%d %H:%M:%S'  
}  
}  
}}}, {$group: {  
    _id: {  
        order_id: '$order_id',  
        FechaVenta: '$FechaVenta'  
    },  
    NoVentas: {  
        $sum: 1  
    }  
}}]]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.items

Connect View Collection Help

Local

3 DBs 22 COLLECTIONS C frasgado.items Aggregations

frasgado.items

Documents Aggregations Schema Explain Plan Indexes Validation

COLLECTION NUMERO\_DE\_ARTICULOS\_VENDIDOS\_POR\_ORDEN SAVE

DOCUMENTS 112.7k TOTAL SIZE 29.1MB AVG. SIZE 271B INDEXES 1 TOTAL SIZE 1.0MB AVG. SIZE 1.0MB

SAMPLE MODE AUTO PREVIEW

HOSTS cluster0-shard-00-02-76pg... cluster0-shard-00-01-76pg... cluster0-shard-00-00-76pg...

CLUSTER Replica Set (atlas-en04-0... 3 Nodes

EDITION MongoDB 4.2.11 Enterprise

Filter your data

admin

frasgado

2019\_nCoV-cases JHU

CLIENTES\_CIUDAD\_ES...

CoV-cases

DETALLE\_VENTA\_E...

No\_DE\_ORDENES\_NO...

VENDEDORES\_ESTAD...

customers

directory

geolocation

h1n1

items

orders

payments

products

reviews

sellers

users

local

Preview of Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

1. \$lookup

Output after \$lookup stage (Sample of 20 documents)

1. \$addFields

Output after \$addFields stage (Sample of 20 documents)

1. \$addFields

Output after \$addFields stage (Sample of 20 documents)

Buscar cualquier cosa

0156 p.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.items

Connect View Collection Help

**Local**

HOSTS  
cluster0-shard-00-02.76pg...  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...

CLUSTER  
Replica Set (atlas-envx04...  
3 Nodes  
EDITION  
MongoDB 4.2.11 Enterprise

Q Filter your data  
> admin  
> frasgado  
2019-CoV-cases-JHU  
CLIENTES\_CIUDAD\_ES...  
CoV-cases  
DETALLE\_VENTA\_E...  
No\_DE\_ORDENES\_NO...  
VENDEDORES\_ESTAD...  
customers  
directory  
geolocation  
h1n1  
items  
orders  
payments  
products  
reviews  
sellers  
users  
> local

frasgado.items

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION NUMERO\_DE\_ARTICULOS\_VENDIDOS POR ORDEN SAVE

\$addFields Output after \$addFields stage (Sample of 20 documents)

```
1: {  
2:   "FechaCompra": "$orderObj.order_purchase_timestamp"  
3: }  
  
id: ObjectId("5fcba11ee1fbadd412fecc")  
id:1  
order_id: "6001f921fe8c5add1ba2dd792cb16214"  
order_item_id: 1  
product_id: "42447313e6eefech4978ad4e2683c13e51"  
seller_id: "4843dd6de18ac802bcce899ec2a041202"  
shipping_limit_date: "19/09/17 9:45"  
price: 56.9  
freight_value: 13.29
```

```
id: ObjectId("5fcba11ee1fbadd412fecc")  
id:2  
order_id: "6001f977f2f032ec557190d7da4fc703e"  
order_item_id: 1  
product_id: "e5f2d520802190e658865e93d83e8f"  
seller_id: "607dcde411e6c2c14532b383fe2d36"  
shipping_limit_date: "08/05/17 11:05"  
price: 130.9  
freight_value: 19.93
```

```
id: ObjectId("5fcba11ee1fbadd412fecc")  
id:3  
order_id: "6001f98224ef6ca0657da4fc703e"  
order_item_id: 1  
product_id: "c777355d18072b67abbeef9df44fd0fd"  
seller_id: "5051e032ed00242ad8848ac88bf2f2d"  
shipping_limit_date: "10/01/18 14:48"  
price: 199  
freight_value: 17.87
```

```
id: ObjectId("5fcba11ee1fbadd412fecc")  
id:4  
order_id: "700024acbcdf046da1"  
order_item_id: 1  
product_id: "7034da1524610f1"  
seller_id: "9d71234a52408524090"  
shipping_limit_date: "15/09/12 18:00"  
price: 12.09  
freight_value: 12.79
```

\$addFields Output after \$addFields stage (Sample of 20 documents)

```
1: {  
2:   "FechaVenta": {  
3:     "$dateToString": {  
4:       "format": "%d-%m-%Y %H:%M:%S"  
5:     }  
6:   }  
7: }  
  
product_id: "42447313e6eefech4978ad4e2683c13e51"  
seller_id: "4843dd6de18ac802bcce899ec2a041202"  
shipping_limit_date: "19/09/17 9:45"  
price: 56.9  
freight_value: 13.29  
FechaCompra: "2017-09-13 08:59:02"  
FechaVenta: "2017-09-13T08:59:02.000+00:00"
```

```
product_id: "e5f2d520802190e658865e93d83e8f"  
seller_id: "607dcde411e6c2c14532b383fe2d36"  
shipping_limit_date: "08/05/17 11:05"  
price: 130.9  
freight_value: 19.93  
FechaCompra: "2017-04-26 10:53:06"  
FechaVenta: "2017-04-26T10:53:06.000+00:00"
```

```
product_id: "c777355d18072b67abbeef9df44fd0fd"  
seller_id: "5051e032ed00242ad8848ac88bf2f2d"  
shipping_limit_date: "10/01/18 14:48"  
price: 199  
freight_value: 17.87
```

```
product_id: "700024acbcdf046da1"  
seller_id: "9d71234a52408524090"  
shipping_limit_date: "15/09/12 18:00"  
price: 12.09  
freight_value: 12.79
```

\$group Output after \$group stage (Sample of 0 documents)

```
1: {  
2:   "_id": {  
3:     "order_id": "$order_id",  
4:     "FechaVenta": "$FechaVenta"  
5:   },  
6:   "NoVentas": {  
7:     "$sum": 1  
8:   }  
9: }
```

No Preview Documents

01:56 p. m.  
07/12/2020

#### 14. Obtener ranking de palabras claves en las comentarios de clientes.

```
{$group: {  
  _id: "$review_comment_title",  
  cont: {  
    $sum: 1  
  }  
}, {$sort: {  
  cont: -1  
}}, {$limit: 30}}
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

HOSTS: cluster0-shard-00-02-76pg... cluster0-shard-00-01-76pg... cluster0-shard-00-00-76pg...

CLUSTER: Replica Set (atlas-enmu04... 3 Nodes

EDITION: MongoDB 4.2.11 Enterprise

Filter your data: admin frasgado

2019-nCoV-cases-JHU CLIENTES\_CIUDAD\_ES... CoV-cases

DETALLE\_VENTA\_E... No\_DE\_ORDENES\_NO... VENDEDORES\_ESTAD...

customers directory geolocation

h1n1 items orders payments products reviews sellers users

local

frasgado.reviews

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION RANKING DE PALABRAS CLAVES SENTIMENTOS SAVE

100000 Documents in the Collection

Preview of Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

`_id: ObjectId("5fc843ebbe1fbadda14bed5")  
_id: 1  
review_id: "7bc2480118092393aa3af98d8a0e8a48"  
order_id: "73fc7af07114b39712ededa79b0a377eb"  
review_score: 4  
review_title: ""  
review_comment_message: ""  
review_creation_date: "18/01/18 0:00"  
review_answer_timestamp: "11/03/18 21:46"`

`_id: ObjectId("5fc843ebbe1fbadda14bed6")  
_id: 2  
review_id: "228c550806dc1d8d828d8d1322874b6f9"  
order_id: "a548910a1c514796b9846df73deba13"  
review_score: 5  
review_title: ""  
review_comment_message: ""  
review_creation_date: "18/01/18 0:00"  
review_answer_timestamp: "11/02/18 8:00"`

`_id: ObjectId("5fc843ebbe1fbadda14bed7")  
_id: 3  
review_id: "e0e6411e11ef94c1ad49d5645fdfe"  
order_id: "f9ab458028109f2ecdecbb34bed034b"  
review_score: 1  
review_title: ""  
review_comment_message: ""  
review_creation_date: "17/02/18 0:00"  
review_answer_timestamp: "18/02/18 14:36"`

`_id: ObjectId("5fc843ebbe1fbadda14bed8")  
_id: 4  
review_id: "ed6fb793a7b5284b"  
order_id: "658677c97b3859b01"  
review_score: 1  
review_title: ""  
review_comment_message: ""  
review_creation_date: "11/03/18 21:46"  
review_answer_timestamp: "12/02/18 14:36"`

\$group

Output after \$group stage (Sample of 100 documents)

`1 /*  
2 * _id: The id of the group.  
3 * field: The first field name.  
4 */  
5 *  
6 * _id: "$review_comment_title",  
7 * cont:  
8 * sum: 1  
9 *  
10 }`

`_id: "Recomendo a loja"  
cont: 3`

`_id: "Sem recomendo"  
cont: 2`

`_id: "No funciona."  
cont: 1`

`_id: "Super recomendo."  
cont: 12`

\$sort

Output after \$sort stage (Sample of 100 documents)

`1 /*  
2 * Provide any number of field/order pairs.  
3 */  
4 *  
5 * cont: -1  
6 *`

`_id: ""  
cont: 88285`

`_id: "Recomendo"  
cont: 426`

`_id: "recomendo"  
cont: 346`

`_id: "Bom"  
cont: 294`

\$limit

Output after \$limit stage (Sample of 30 documents)

`1 /*  
2 * Provide the number of documents to limit.  
3 */  
4 *  
5 * 30`

`_id: ""  
cont: 88285`

`_id: "Recomendo"  
cont: 426`

`_id: "recomendo"  
cont: 346`

`_id: "Bom"  
cont: 294`

SAMPLE MODE AUTO PREVIEW

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

02:00 p.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

HOSTS: cluster0-shard-00-02-76pg... cluster0-shard-00-01-76pg... cluster0-shard-00-00-76pg...

CLUSTER: Replica Set (atlas-enmu04... 3 Nodes

EDITION: MongoDB 4.2.11 Enterprise

Filter your data: admin frasgado

2019-nCoV-cases-JHU CLIENTES\_CIUDAD\_ES... CoV-cases

DETALLE\_VENTA\_E... No\_DE\_ORDENES\_NO... VENDEDORES\_ESTAD...

customers directory geolocation

h1n1 items orders payments products reviews sellers users

local

frasgado.reviews

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION RANKING DE PALABRAS CLAVES SENTIMENTOS SAVE

100.0k DOCUMENTS TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

Output after \$group stage (Sample of 100 documents)

`1 /*  
2 * _id: The id of the group.  
3 * field: The first field name.  
4 */  
5 *  
6 * _id: "$review_comment_title",  
7 * cont:  
8 * sum: 1  
9 *  
10 }`

`_id: "Recomendo a loja"  
cont: 3`

`_id: "Sem recomendo"  
cont: 2`

`_id: "No funciona."  
cont: 1`

`_id: "Super recomendo."  
cont: 12`

\$sort

Output after \$sort stage (Sample of 100 documents)

`1 /*  
2 * Provide any number of field/order pairs.  
3 */  
4 *  
5 * cont: -1  
6 *`

`_id: ""  
cont: 88285`

`_id: "Recomendo"  
cont: 426`

`_id: "recomendo"  
cont: 346`

`_id: "Bom"  
cont: 294`

\$limit

Output after \$limit stage (Sample of 30 documents)

`1 /*  
2 * Provide the number of documents to limit.  
3 */  
4 *  
5 * 30`

`_id: ""  
cont: 88285`

`_id: "Recomendo"  
cont: 426`

`_id: "recomendo"  
cont: 346`

`_id: "Bom"  
cont: 294`

SAMPLE MODE AUTO PREVIEW

ADD STAGE

02:01 p.m. 07/12/2020

15. Obtener las primeras 10 rutas con más comentarios negativos.

```
[{$lookup: {  
    from: 'items',  
    localField: 'order_id',  
    foreignField: 'order_id',  
    as: 'itemsArr'  
}}, {$match: {  
    review_score: { $in: [ 4, 5 ] }  
}}, {$unwind: {  
    path: "$itemsArr"  
}}, {$lookup: {  
    from: 'sellers',  
    localField: 'itemsArr.seller_id',  
    foreignField: 'seller_id',  
    as: 'selArr'  
}}, {$unwind: {  
    path: "$selArr"  
}}, {$group: {  
    _id: {  
        seller_state: "$selArr.seller_state",  
        seller_city: "$selArr.seller_city"  
    },  
    numComentNeg: {  
        $sum: 1  
    }  
}}, {$sort: {  
    numComentNeg: -1  
}}, {$limit: 10}]
```

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

HOSTS: cluster0-shard-00-02-76pg..., cluster0-shard-00-01-76pg..., cluster0-shard-00-00-76pg...

CLUSTER: Replica Set (atlas-enmu04... 3 Nodes)

EDITION: MongoDB 4.2.11 Enterprise

Filter your data

> admin

> frasgado

2019-mCoV-cases-JHU

CLIENTES\_CIUDAD\_ES...

CoV-cases

DETALLE\_VENTA\_E...

No\_DE\_ORDENES\_NO...

VENDEDORES\_ESTAD...

customers

directory

geolocation

h1n1

items

orders

payments

products

reviews

sellers

users

> local

frasgado.reviews

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION: RUTA\_RECIBIO\_COMENTARIOS\_NEGATIVOS - Modified

Aggregation Pipeline:

```

1. $lookup
2. $match
3. $unwind
4. $group
    
```

Output after **\$lookup** stage (Sample of 20 documents)

```

1 <-
  from: 'items',
  localField: 'order_id',
  foreignField: 'order_id',
  as: 'itemArr'
}
    
```

Output after **\$match** stage (Sample of 20 documents)

```

1 <-
  review_score: { $in: [ 4, 5 ] }
}
    
```

Output after **\$unwind** stage (Sample of 20 documents)

```

1 <-
  path: "itemArr"
}
    
```

Output after **\$group** stage (Sample of 20 documents)

```

1 <-
  {
    _id: '$oid',
    review_id: '$oid',
    review_order_id: '$oid',
    review_item_id: '$oid',
    review_comment_title: '$oid',
    review_comment_message: '$oid',
    review_creation_date: '$oid',
    review_answer_timestamp: '$oid'
  }
}
    
```

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG SIZE 928.0KB

SAMPLE MODE AUTO PREVIEW

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

HOSTS: cluster0-shard-00-02-76pg..., cluster0-shard-00-01-76pg..., cluster0-shard-00-00-76pg...

CLUSTER: Replica Set (atlas-enmu04... 3 Nodes)

EDITION: MongoDB 4.2.11 Enterprise

Filter your data

> admin

> frasgado

2019-mCoV-cases-JHU

CLIENTES\_CIUDAD\_ES...

CoV-cases

DETALLE\_VENTA\_E...

No\_DE\_ORDENES\_NO...

VENDEDORES\_ESTAD...

customers

directory

geolocation

h1n1

items

orders

payments

products

reviews

sellers

users

> local

frasgado.reviews

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION: RUTA\_RECIBIO\_COMENTARIOS\_NEGATIVOS - Modified

Aggregation Pipeline:

```

1. $unwind
2. $group
    
```

Output after **\$unwind** stage (Sample of 20 documents)

```

1 <-
  path: "itemArr"
}
    
```

Output after **\$group** stage (Sample of 0 documents)

```

1 <-
  {
    _id: '$oid',
    review_id: '$oid',
    review_order_id: '$oid',
    review_item_id: '$oid',
    review_comment_title: '$oid',
    review_comment_message: '$oid',
    review_creation_date: '$oid',
    review_answer_timestamp: '$oid'
  }
}
    
```

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG SIZE 928.0KB

SAMPLE MODE AUTO PREVIEW

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

**Local**

frasgado.reviews

Aggregations

Documents Schema Explain Plan Indexes Validation

COLLATION RUTA\_RECIBIO\_COMENTARIOS\_NEGATIVOS-Modified

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

**Aggregations**

\$group

```
1 * {
  2   "_id: {
  3     "seller_state": "$sellArr.seller_state",
  4     "seller_city": "$sellArr.seller_city"
  5   },
  6   "numConsentNeg": {
  7     "$sum: 1
  8   }
  9 }
```

Error in \$cursor stage :: caused by :: operation exceeded time limit

\$sort

```
1 /**
 2  * Provide any number of field/order pairs.
 3  */
 4 {
 5   "numConsentNeg": -1
 6 }
```

Error in \$cursor stage :: caused by :: operation exceeded time limit

\$limit

```
1 /**
 2  * Provide the number of documents to limit.
 3  */
 4 10
```

Error in \$cursor stage :: caused by :: operation exceeded time limit

Output after \$group stage (Sample of 0 documents)

Output after \$sort stage (Sample of 0 documents)

Output after \$limit stage (Sample of 0 documents)

SAMPLE MODE AUTO PREVIEW

Loading Preview Documents...

Loading Preview Documents...

Loading Preview Documents...

Filter your data

admin frasgado

2019-nCoV-cases-JHU CLIENTES\_CIUDAD\_ES... ColV-cases DETALLE\_VENTA\_E... No\_DE\_ORDENES\_NO... VENDEDORES\_ESTAD... customers directory geolocation h1n1 items orders payments products reviews sellers users local

\_MongoSH Beta

## 16. Crear vista en MYSQL de los siguientes puntos:

Vista de números de ventas por año y mes

CREATE VIEW vista1 AS

```
select year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as anio,
month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as mes,
count(*) as NuVentas
from orders
group by
year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')), month(str_to_date(order_purchase_timestamp, '%d/%m/%Y'))
order by year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) desc ,
month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) asc
;
```

The screenshot shows the MySQL Workbench interface. In the top navigation bar, tabs include 'MySQL Model\*', 'EER Diagram', 'File', 'Edit', 'View', 'Query', 'Database', 'Server', 'Tools', 'Scripting', and 'Help'. The main area displays a SQL editor with the following code:

```

21
22
23
24 • CREATE VIEW vista1 AS
25   select year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as anio,
26   month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) as mes,
27   count(*) as NuVentas
28   from orders
29   group by
30   year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')), month(str_to_date(order_purchase_timestamp, '%d/%m/%Y'))
31   order by year(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) desc , month(str_to_date(order_purchase_timestamp, '%d/%m/%Y')) asc
32
33
34

```

The status bar at the bottom right shows the time as 03:12 p.m. and the date as 07/12/2020.

## Vista con detalles de artículos

**CREATE VIEW view AS**

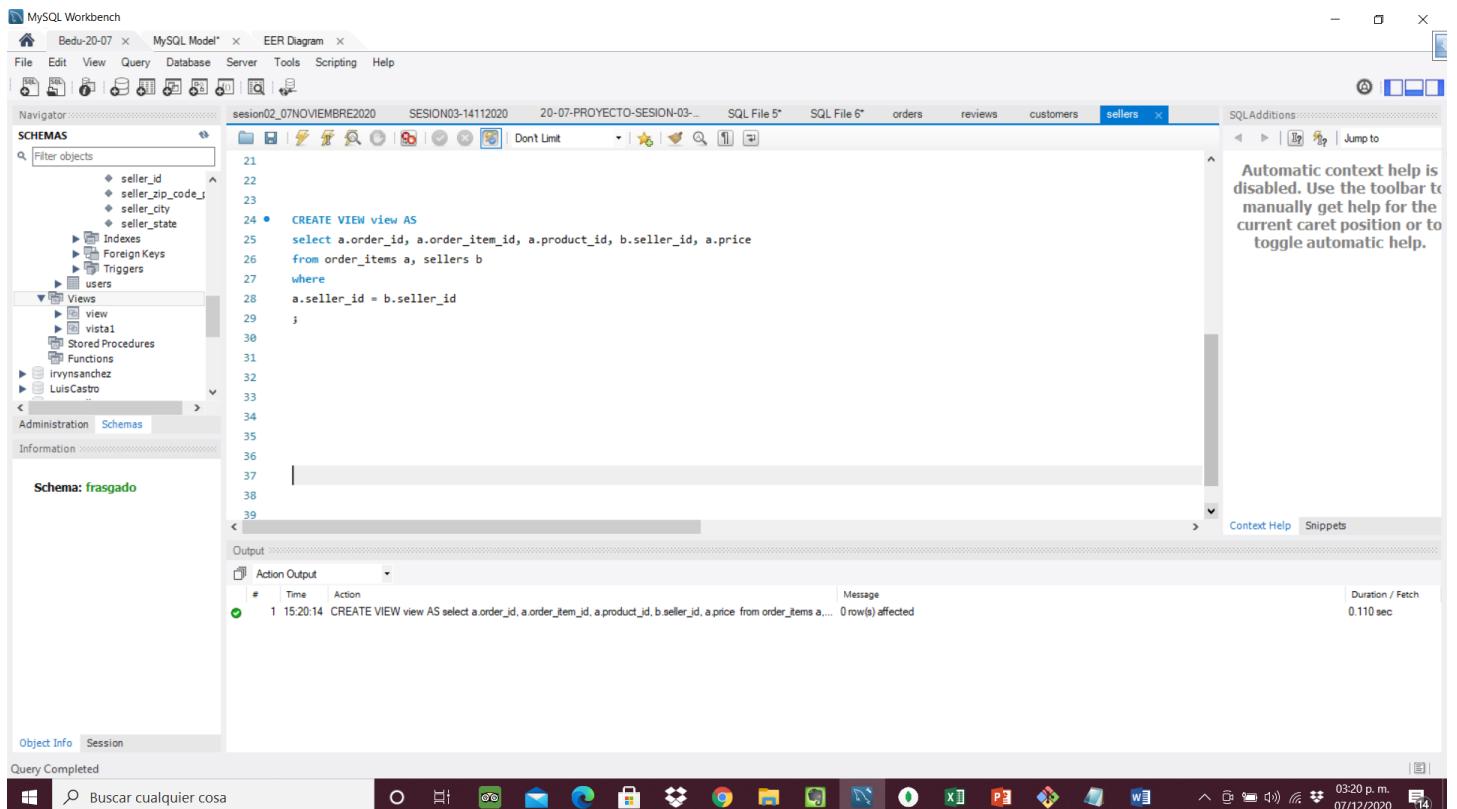
```
select a.order_id, a.order_item_id, a.product_id, b.seller_id, a.price
```

```
from order_items a, sellers b
```

where

```
a.seller_id = b.seller_id
```

;



## 17. Crear vistas en MONGO DB de los siguientes puntos:

### Vista Vendedores por Estado y Ciudad.

Enter a View Name  
VENDEDORES\_ESTADO\_CIUDAD

Validation

SAMPLE MODE AUTO PREVIEW

DOCUMENTS 3.1K TOTAL SIZE 462.9KB AVG. SIZE 153B INDEXES 1 TOTAL SIZE 56.0KB AVG. SIZE 56.0KB

`1 /**
2 * Provide any number of field/order pairs.
3 */
4 {
5 numVendedores: -1
6 }`

`1 _id:Object
numVendedores:124
Ciudad:"curitiba"
Estado:"PR"`

`1 _id:Object
numVendedores:9
Ciudad:"rio de
Estado:"RJ"`

`1 _id:Object
numVendedores:694
Ciudad:"sao paulo"
Estado:"SP"`

MongoDB Compass - cluster0.76phg.mongodb.net:27017

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.sellers Aggregations frasgado.VENDEDORES\_ESTADO\_CIUDAD Documents

frasgado.VENDEDORES\_ESTADO\_CIUDAD (view on: frasgado.sellers) MODIFY SOURCE Read Only

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER Options FIND RESET ...

Displaying documents 1 - 20 of 636 < > C REFRESH

numVendedores: 22  
Ciudad: "joinville"  
Estado: "SC"

numVendedores: 33  
Ciudad: "sao jose do rio preto"  
Estado: "SP"

numVendedores: 52  
Ciudad: "ribeliao preto"  
Estado: "SP"

numVendedores: 25  
Ciudad: "londrina"  
Estado: "PR"

numVendedores: 32  
Ciudad: "osasco"  
Estado: "SP"

numVendedores: 41  
Ciudad: "campinas"  
Estado: "SP"

>\_MongoSH Beta

Buscar cualquier cosa 11:33 a.m. 07/12/2020

## Vista Clientes por Ciudad y Estado

MongoDB Compass - cluster0.76phg.mongodb.net:27017/frasgado.customers

Connect View Collection Help

**Local**

3 DBS 19 COLLECTIONS

frasgado.orders Aggregations frasgado.sellers Aggregations frasgado.customers Aggregations

frasgado.customers Aggregations

DOCUMENTS 99.4k TOTAL SIZE 20.7MB AVG. SIZE 216B INDEXES 1 TOTAL SIZE 896.0KB AVG. SIZE 896.0KB

Create a View

Enter a View Name: CLIENTES\_CIUDAD\_ESTADO

CANCEL CREATE

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

customer\_unique\_id: "861eff4711a542e4b93843c6dd7febb0"  
customer\_zip\_code\_prefix: "14409"  
customer\_city: "franca"  
customer\_state: "SP"

Validation SAMPLE MODE AUTO PREVIEW

Output after \$group stage (Sample of 20 documents)

```

1 /**
2  * _id: The id of the group.
3  * field: The first field name.
4  */
5 {
6   "_id": {
7     "customer_city": "$customer_city",
8     "customer_state": "$customer_state"
9   },
10  "numClientes: {
11    "$sum: 1
12  }
13 }

```

Output after \$addFields stage (Sample of 20 documents)

```

_id:Object
numClientes:2

```

>\_MongoSH Beta

Buscar cualquier cosa 11:49 a.m. 07/12/2020

MongoDB Compass - cluster0.76pg.h.mongodb.net:27017

Connect View Collection Help

Local

3 DBs 19 Collections C

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enxu04-...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data

2019-nCoV-cases-JHU

CLIENTES\_CIUDAD\_E... ...

CoV-cases

DETALLE\_VENTA

VENDEDORES\_ESTA...

customers

directory

geolocation

h1n1

items

orders

payments

products

frasgado.orders Aggregations

frasgado.sellers Aggregations

frasgado.customers Aggregations

frasgado.CLIENTES\_CIUDAD\_ESTADO Documents

frasgado.CLIENTES\_CIUDAD\_ESTADO (view on: frasgado.customers) MODIFY SOURCE

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER

OPTIONS FIND RESET ...

VIEW

Displaying documents 1 - 20 of 4310

C REFRESH

	numClientes	Ciudad	Estado
1	613	"recife"	"PE"
2	849	"niteroi"	"RJ"
3	1521	"curitiba"	"PR"
4	654	"fortaleza"	"CE"
5	746	"osasco"	"Sp"
6	1189	"guarulhos"	"Sp"

>\_MongoSH Beta

Buscar cualquier cosa

1148 a. m.  
07/12/2020

Vista con Número de órdenes “NO ENTREGADOS”.

MongoDB Compass - cluster0.76pgh.mongodb.net:27017/frasgado.reviews

Connect View Collection Help

Local

3 DBs 19 COLLECTIONS C

HOSTS

cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER

Replica Set (atlas-enxu04-...  
3 Nodes

EDITION

MongoDB 4.2.11 Enterprise

Filter your data

VENDEDORES\_ESTA...

customers

directory

geolocation

h1n1

items

orders

payments

products

reviews

sellers

users

local

frasgado.orders Aggregations

frasgado.sellers Aggregations

frasgado.customers Aggregations

frasgado.reviews Aggregations

DOCUMENTS 100.0k TOTAL SIZE 30.0MB AVG. SIZE 315B INDEXES 1 TOTAL SIZE 928.0KB AVG. SIZE 928.0KB

Validation

SAMPLE MODE AUTO PREVIEW

Create a View

Enter a View Name

No\_DE\_ORDENES\_NO\_ENTREGADO

CANCEL CREATE

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

\$match

Output after \$match stage (Sample of 10 documents)

1 //\*\*  
2 \* query: The query in MQL.  
3 \*/  
4 {  
5 "review\_comment\_message": {  
6 \$in: [/PRODUTO NAO ENTREGUE/i]  
7 }  
8 }

\_id: ObjectId("5fcba43bee1fba4dd414b6d6")  
id: 2  
review\_id: "80e641a11e56f04c1ad469d5645fdfde"  
order\_id: "a548910a1c54779b098fd73dbeba33"  
review\_score: 4  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/01/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 3  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 2  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 3  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 4  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 5  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 6  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 7  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 8  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 9  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

\_id: ObjectId("5fcba448ee1fba4dd41530ac")  
id: 10  
review\_id: "88743d1e8eb7bca0e12830855ccda2"  
order\_id: "88743d1e8eb7bca0e12830855ccda2"  
review\_score: 5  
review\_comment\_title: ""  
review\_comment\_message: ""  
review\_creation\_date: "18/03/18 0:00"

ADD STAGE

MongoSH Beta

Buscar cualquier cosa

1157 a.m. 07/12/2020

MongoDB Compass - cluster0.76pgh.mongodb.net:27017

Connect View Collection Help

Local

HOSTS  
cluster0-shard-00-01.76pg...  
cluster0-shard-00-00.76pg...  
cluster0-shard-00-02.76pg...

CLUSTER  
Replica Set (atlas-enu04...  
3 Nodes

EDITION  
MongoDB 4.2.11 Enterprise

Filter your data  
No\_DE\_ORDENES\_N...  
VENDEDORES\_ESTA...

customers  
directory  
geolocation  
h1n1  
items  
orders  
payments  
products  
reviews  
sellers  
users

frasgado.orders Aggregations frasgado.sellers Aggregations frasgado.customers Aggregations frasgado.reviews Aggregations frasgado.No\_DE\_ORDENES\_NO\_ENTREGADOS Documents

MODIFY SOURCE Read Only

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER OPTIONS FIND RESET ...

DISPLAYING DOCUMENTS 1 - 10 OF 10

frasgado.No\_DE\_ORDENES\_NO\_ENTREGADOS (view on: frasgado.reviews)

Document 1 of 10

```
_id: ObjectId("5fcb43f1ee1fb04dd414be75")
id: 1953
review_id: "81a57c09af35f9736f70b0ba6a16af118"
order_id: "167d05678fb10589a854d30460ae62f0"
review_score: 1
review_comment_title: ""
review_comment_message: "Demora, produto nao entregue!"
review_creation_date: "07/03/18 0:00"
review_answer_timestamp: "07/03/18 15:26"
```

Document 2 of 10

```
_id: ObjectId("5fcb4480ee1fb04dd41530ac")
id: 31192
review_id: "60f9061730239352e7901a9ff1b4a55ee"
order_id: "88743d1e8e7b5ca01e12830855ccda2"
review_score: 1
review_comment_title: ""
review_comment_message: "produto nao entregue em mais de um mes de espera"
review_creation_date: "24/03/18 0:00"
review_answer_timestamp: "24/03/18 12:12"
```

Document 3 of 10

```
_id: ObjectId("5fcb4529ee1fb04dd415bf85")
id: 67761
review_id: "aa28f65462c9a513c88a2e80da5445c0"
order_id: "a2774eabce51067c32cfb2813ac902ad"
review_score: 1
review_comment_title: ""
review_comment_message: "Produto nao entregue, enviado um dos itens da compra sem NF apenas com..."
review_creation_date: "14/12/17 0:00"
review_answer_timestamp: "15/12/17 17:24"
```