

RETO 1

Con base en el ejemplo 1, modifica el agrupamiento para que muestre el costo promedio por habitación por país de las propiedades de tipo casa.

≡

\$match

+

```
1 /*  
2 * query: The query in MQL.  
3 */  
4 {  
5   property_type:"House",  
6   bedrooms: {$gte: 1}  
7 }
```

number_of_reviews: 55
bathrooms: 2.0
amenities: Array
price: 194.00
security_deposit: 100.00
cleaning_fee: 200.00
extra_people: 0.00
guests_included: 4
images: Object
host: Object

_id: "18616850"
listing_url: "https://www.airbnb.com/rooms/
name: "The Paddington Cottage | Sydney East
summary: "A member of Dinnigan Cocks | Besp
we acquired this prop..."
space: "Mary Place retains all the properti
original artisanal cotta..."
description: "A member of Dinnigan Cocks |
we acquired this prop..."

≡

\$addFields

+

```
1 /*  
2 * newField: The new field name.  
3 * expression: The new field expression.  
4 */  
5 {  
6   costo_recamara:{$divide:["$price","$bedrooms"]}  
7 }
```

↑ HIDE 15 FIELDS

_id: "18616850"
listing_url: "https://www.airbnb.com/rooms/
name: "The Paddington Cottage | Sydney East
summary: "A member of Dinnigan Cocks | Besp
we acquired this prop..."
space: "Mary Place retains all the properti
original artisanal cotta..."
description: "A member of Dinnigan Cocks |
we acquired this prop..."

≡

\$group

+

```
1 /*  
2 * _id: The id of the group.  
3 * fieldName: The first field name.  
4 */  
5 {  
6   _id: "$address.country",  
7   recamaras: {  
8     $sum: 1  
9   },  
10  total:{  
11    $sum: "$costo_recamara"  
12  }  
13 }
```

_id: "Brazil"
recamaras: 55
total: 19176.4000000000000000000000000000

_id: "Hong Kong"
recamaras: 20
total: 10292.003333333333333333333333333333

≡

\$addFields

+

```
1 /*  
2 * newField: The new field name.  
3 * expression: The new field expression.  
4 */  
5 {  
6   costo_promedio:{$divide: ["$total","$recamaras"]}  
7 }
```

_id: "Turkey"
recamaras: 36
total: 7555.50
costo_promedio: 209.875

_id: "Portugal"
recamaras: 70
total: 2800.150000000000000000000000000000
costo_promedio: 40.002142857142857142857142

RETO 2

Usando las colecciones `comments` y `users`, se requiere conocer el correo y contraseña de cada persona que realizó un comentario. Construye un pipeline que genere como resultado estos datos.

▼

\$lookup

☒

```
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 colle
7  * let: Optional variables to use in the pipeline fi
8  */
9
10 {
11   from: 'users',
12   localField: 'name',
13   foreignField: 'name',
14   as: 'usuario'
15 }
```

Output after [\\$lookup](#) stage ⓘ (Sample of 20 documents)

```
_id: ObjectId("5a9427648b0beebe69579cc")
name: "Andrea Le"
email: "andrea_le@fakegmail.com"
movie_id: ObjectId("573a1390f29313caabdc418c")
text: "Rem officiis eaque repellendus amet eos
doloribus. Porro dolor volupta..."
date: 2012-03-26T23:20:16.000+00:00
usuario: Array
```

```
_id: ObjectId("5a9427648b0beebe69579cf")
name: "Greg Powell"
email: "greg_powell@fakegmail.com"
movie_id: ObjectId("573a1390f29313caabdc41b")
text: "Tenetur dolorum molestiae ea. Eligen
praesentium unde quod porro. Co..."
date: 1987-02-10T00:29:36.000+00:00
usuario: Array
```

▼

\$addFields

☒

```
1 /**
2  * newField: The new field name.
3  * expression: The new field expression.
4  */
5 {
6   usuario_datos: { $arrayElemAt: ["$usuario", 0] }
7 }
```

Output after [\\$addFields](#) stage ⓘ (Sample of 20 documents)

```
_id: ObjectId("5a9427648b0beebe69579cc")
name: "Andrea Le"
email: "andrea_le@fakegmail.com"
movie_id: ObjectId("573a1390f29313caabdc418c")
text: "Rem officiis eaque repellendus amet eos
doloribus. Porro dolor volupta..."
date: 2012-03-26T23:20:16.000+00:00
usuario: Array
usuario_datos: Object
```

```
_id: ObjectId("5a9427648b0beebe69579cf")
name: "Greg Powell"
email: "greg_powell@fakegmail.com"
movie_id: ObjectId("573a1390f29313caabdc41b")
text: "Tenetur dolorum molestiae ea. Eligen
praesentium unde quod porro. Co..."
date: 1987-02-10T00:29:36.000+00:00
usuario: Array
usuario_datos: Object
```

▼

\$addFields

☒

```
1 /**
2  * newField: The new field name.
3  * expression: The new field expression.
4  */
5 {
6   contrasenia: "$usuario_datos.password"
7 }
```

Output after [\\$addFields](#) stage ⓘ (Sample of 20 documents)

```
name: "Andrea Le"
email: "andrea_le@fakegmail.com"
movie_id: ObjectId("573a1390f29313caabdc418c")
text: "Rem officiis eaque repellendus amet eos
doloribus. Porro dolor volupta..."
date: 2012-03-26T23:20:16.000+00:00
usuario: Array
usuario_datos: Object
contrasenia: "$2b$12$J587HwUL2y0P1E6KyrCbK0X22.wskEdLt"
```

```
_id: ObjectId("5a9427648b0beebe69579cf")
name: "Greg Powell"
email: "greg_powell@fakegmail.com"
movie_id: ObjectId("573a1390f29313caabdc41b")
text: "Tenetur dolorum molestiae ea. Eligen
praesentium unde quod porro. Co..."
date: 1987-02-10T00:29:36.000+00:00
usuario: Array
usuario_datos: Object
```

▼

\$project

☒

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

Output after [\\$project](#) stage ⓘ (Sample of 20 documents)

```
name: "Andrea Le"
email: "andrea_le@fakegmail.com"
contrasenia: "$2b$12$J587HwUL2y0P1E6KyrCbK0X22.wskEdLt"
```

```
name: "Greg Powell"
email: "greg_powell@fakegmail.com"
contrasenia: "$2b$12$XpveUB6KiU9zG58ABw260"
```

RETO 3

Usando el pipeline que generaste en el Reto 2, genera la vista correspondiente.

sample_mflix.comentario usuario (view on: sample_mflix.comments)

MODIFY SOURCE

Documents

Aggregations

Schema

Explain Plan

Indexes

Validation

FILTER

{name: "Meera Reed"}

VIEW

name: "Meera Reed"

email: "ellie_kendrick@gameofthron.es"

contrasenia: "\$2b\$12\$SdyXPBMdGScx6DePpPawFeOqcpwjdHAUTXaPl0mkvWeLzZk6EWti"

name: "Meera Reed"

email: "ellie_kendrick@gameofthron.es"

contrasenia: "\$2b\$12\$SdyXPBMdGScx6DePpPawFeOqcpwjdHAUTXaPl0mkvWeLzZk6EWti"

name: "Meera Reed"

email: "ellie_kendrick@gameofthron.es"

contrasenia: "\$2b\$12\$SdyXPBMdGScx6DePpPawFeOqcpwjdHAUTXaPl0mkvWeLzZk6EWti"

name: "Meera Reed"

email: "ellie_kendrick@gameofthron.es"

contrasenia: "\$2b\$12\$SdyXPBMdGScx6DePpPawFeOqcpwjdHAUTXaPl0mkvWeLzZk6EWti"

name: "Meera Reed"

email: "ellie_kendrick@gameofthron.es"

contrasenia: "\$2b\$12\$SdyXPBMdGScx6DePpPawFeOqcpwjdHAUTXaPl0mkvWeLzZk6EWti"

EJERCICIO

Continuaremos trabajando con la base de datos de películas y sus comentarios.

El ejercicio consiste en obtener, por país, el número de películas que hay de cada genero. Un ejemplo de salida, en formato de tabla, sería:

pais	genero	peliculas
USA	Short	10
USA	Drama	20
...

▼

23530 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("573a1390f29313caabcd4135")
plot: "Three men hammer on an anvil and pass a bottle of beer around."
genres: Array
  0: "Short"
runtime: 1
cast: Array
  num_mflix_comments: 1
  title: "Blacksmith Scene"
  fullplot: "A stationary camera looks at a large anvil w
```

```
_id: ObjectId("573a1390f29313caabcd42e0")
plot: "A group of bandits stage a brazen train robbery only to find a determined hero."
genres: Array
  0: "Short"
  1: "Western"
runtime: 11
cast: Array
  poster: "https://m.media
```

Desenvolviendo el array de genres

Desenvolviendo el array de countries

```
1 > /**
2  * path: Path to the array field.
3  * includeArrayIndex: Optional name for index.
4  * preserveNullAndEmptyArrays: Optional
5  *   toggle to unwind null and empty values.
6  */
7 > {
8   path: "$countries",
9   preserveNullAndEmptyArrays: true
10 }
```

Output after [Sunwind](#) stage ⓘ (Sample of 20 documents)

```
{
  "_id": ObjectId("573a139f29313caabcd7da6"),
  "plot": "Millie Stope lives with her grandfather on a
    remote island. Her grandf...",
  "genres": "Drama",
  "runtime": 88,
  "rated": "PASSED",
  "cast": Array,
  "num_mflix_comments": 2,
  "poster": "https://m.media-..."
}
```

```
{
  "_id": ObjectId("573a139f29313caabcd7da6"),
  "plot": "Millie Stope lives with her grandfat
    remote island. Her grandf...",
  "genres": "Romance",
  "runtime": 88,
  "rated": "PASSED",
  "cast": Array,
  "num_mflix_comments": 2,
  "poster": "https://m.media-..."
}
```

Agrupando géneros y países

The screenshot shows the MongoDB Compass interface. On the left, the query editor contains a JSON query:

```
{ "_id": "The id of the group", "fieldN": "The first field name." }
```

. The top bar shows the database 'group' and a collection 'group'. The right pane displays the output after the \$group stage, showing two documents: one with '_id: Object' and 'total: 13', and another with '_id: Object' and 'total: 4'.

Mostrando resultado

Jesús Ismael Pineda Hernández – Sesión 7

☰

\$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   genero: "$_id.generos",
7   pais: "$_id.países"
8 }
```

▶ `_id: Object`
`total: 26`
`genero: "Mystery"`
`pais: "South Korea"`

▶ `_id: Object`
`total: 2`
`genero: "Comedy"`
`pais: "Bosnia and Herzegovina"`

☰

\$project

🔴

🗑️

+

Output after [\\$project](#) stage ⓘ (Sample of 20 documents)

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

total: 1
genero: "News"
pais: "Hong Kong"

total: 104
genero: "Sci-Fi"
pais: "Canada"