

## RETO 1

Primero filtramos los documentos con Internet desde Wifi o desde cable. Para ello usamos `$match` que permite realizar filtros dentro de agregaciones

The screenshot shows the MongoDB Compass interface with an aggregation pipeline. The first stage is `$match`, which is active. The query in the pipeline is:

```
1 //**
2 * query: The query in MQL.
3 */
4 {
5   amenities: { $in: ["Wifi", "Ethernet"] }
6 }
7
```

The output after the `$match` stage (Sample of 20 documents) shows two sample documents:

```
{
  "_id": "10006546",
  "listing_url": "https://www.airbnb.com/rooms/10006546",
  "name": "Ribeira Charming Duplex",
  "summary": "Fantastic duplex apartment with three bedroom located in the historical square, our apartment ...",
  "space": "Privileged views of the Douro River and Ribeira square, our apartment ...",
  "description": "Fantastic duplex apartment with three bedroom located in the historical ..."
}
```

```
{
  "_id": "10009999",
  "listing_url": "https://www.airbnb.com/rooms/10009999",
  "name": "Horto flat with small garden",
  "summary": "One bedroom + sofa-bed in quiet and bucolic neighbourhood right next to ...",
  "space": "Lovely one bedroom + sofa-bed in the living room perfect for two but ...",
  "description": "One bedroom + sofa-bed in quiet and bucolic neighbourhood right next to ..."
}
```

The second stage is `$group`, which is also active. The query in the pipeline is:

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

The output after the `$group` stage (Sample of 1 document) shows one sample document:

```
{
  "_id": null,
  "Total": 5303
}
```

///`"Id NULL"` va a acumular todos los campos en uno solo y va a aplicarse la función de acumulación

The screenshot shows the MongoDB Compass interface with an aggregation pipeline. The first stage is `$group`, which is active. The query in the pipeline is:

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

The output after the `$group` stage (Sample of 1 document) shows one sample document:

```
{
  "_id": null,
  "total_price": 192479.00,
  "count": 586
}
```

//RETO 02

```
[{$match: {  
  property_type: /house/  
}}, {$group: {  
  _id: "$address.country" ,  
  avg_price : {  
    $avg: "$price"  
  }  
}}]
```

//Reto 03

```
[{  
  $lookup: {  
    from: 'users',  
    localField: 'name',  
    foreignField: 'name',  
    as: 'user_data'  
  }  
}, {  
  $addFields: {  
    usuario_objeto: {  
      $arrayElemAt: ["$user_data", 0]  
    }  
  }  
}, {  
  $addFields: {  
    usuario_password: "$user_data.password"  
  }  
}]
```

## RETO 03 CREATE VIEW

The screenshot shows the MongoDB Compass interface. On the left, the database structure is visible, including the 'sample\_airbnb' database and the 'listingsAndReviews' collection. The 'usuario\_password' view is selected. The main panel displays the view's content, showing two documents. The first document is for a listing with ID '10006546', and the second is for a listing with ID '10009999'. The view is titled 'sample\_airbnb.usuario\_password (view on: sample\_airbnb.listingsAndReviews)'.

sample\_airbnb.usuario\_password (view on: sample\_airbnb.listingsAndReviews)

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER OPTIONS FIND RESET

Displaying documents 1 - 20 of 5555 REFRESH

```
{
  "_id": "10006546",
  "listing_url": "https://www.airbnb.com/rooms/10006546",
  "name": "Ribeira Charming Duplex",
  "summary": "Fantastic duplex apartment with three bedrooms, located in the histori...",
  "space": "Privileged views of the Douro River and Ribeira square, our apartment ...",
  "description": "Fantastic duplex apartment with three bedrooms, located in the histori...",
  "neighborhood_overview": "In the neighborhood of the river, you can find several restauran...",
  "notes": "Lose yourself in the narrow streets and staircases zone, have lunch in...",
  "transit": "Transport: • Metro station and S. Bento railway 5min; • Bus stop a 50 ...",
  "access": "We are always available to help guests. The house is fully available t...",
  "interaction": "Cot - 10 € / night Dog - € 7,5 / night",
  "house_rules": "Make the house your home...",
  "property_type": "House",
  "room_type": "Entire home/apt",
  "bed_type": "Real Bed",
  "minimum_nights": "2",
  "maximum_nights": "30",
  "cancellation_policy": "moderate",
  "last_scraped": "2019-02-16T05:00:00.000+00:00",
  "calendar_last_scraped": "2019-02-16T05:00:00.000+00:00",
  "first_review": "2016-01-03T05:00:00.000+00:00",
  "last_review": "2019-01-20T05:00:00.000+00:00",
  "accommodates": 8,
  "bedrooms": 3,
  "beds": 5
}
```

SHOW 15 MORE FIELDS

```
{
  "_id": "10009999",
  "listing_url": "https://www.airbnb.com/rooms/10009999"
}
```