

Reto 1

- Propiedades que no permitan fiestas.

```
{
  filter: {
    house_rules: RegExp('no parties', i)
  }
}
```

sample_airbnb.listingsAndReviews

DOCUMENTS

Documents Aggregations Schema Explain Plan Indexes

FILTER {house_rules: /no parties/i}

ADD DATA VIEW {}

>

_id: "103161"

listing_url: "https://www.airbnb.com/rooms/103161"

name: "Cozy Art Top Floor Apt in PRIME Williamsburg!"

summary: "My Apt it's right in the middle of the best and hot spots in the heart..."

space: "Hi there! This is a cozy and impeccable one bedroom apartment in the h..."

description: "My Apt it's right in the middle of the best and hot spots in the heart..."

neighborhood_overview: "Bedford Avenue is the neighborhood's main thoroughfare, with its colle..."

notes: "CHECK OUT: It is always at 11:00 am because my cleaning lady comes at ..."

transit: "Yes, there is plenty of public transportation around. 5 metro lines: ..."

access: "To the all Apt less my personal things. No closet available."

interaction: "As much as they need my help and guidance."

house_rules: "-SMOKE is NOT allowed inside the Apt. -NO parties are allowed. -NO Kid..."

property_type: "Apartment"

room_type: "Entire home/apt"

bed_type: "Real Bed"

minimum_nights: "2"

maximum_nights: "300"

cancellation_policy: "strict_14_with_grace_period"

last_scraped: 2019-03-07T05:00:00.000+00:00

calendar_last_scraped: 2019-03-07T05:00:00.000+00:00

first_review: 2013-09-21T04:00:00.000+00:00

last_review: 2019-02-18T05:00:00.000+00:00

accommodates: 2

bedrooms: 1

beds: 2

- Propiedades que admitan mascotas.

```
{
  filter: {
    house_rules: RegExp('Pets Allowed', i)
  },
  project: {
    house_rules: 1
  }
}
```

sample_airbnb.listingsAndReviews

00

Documents Aggregations Schema Explain Plan Indexes

FILTER {house_rules: /Pets Allowed/i}

PROJECT {house_rules:1}

SORT

COLLATION

VIEW {}

_id: "11197217"

house_rules: "We would appreciate if the guest, as leaving the apartment even for a ..."

_id: "12259367"

house_rules: "- There should be no smoking inside the apartment. Outside in Balcony ..."

_id: "13146333"

house_rules: "KEYCARDS: Please leave all keys on counter in unit at checkout. \$30 wi..."

_id: "13161668"

house_rules: "- Only small pets allowed"

```
{
  filter: {
    house_rules: {
      $not: RegExp('no pet', i)
    }
  },
  project: {
    house_rules: 1
  }
}
```

sample_airbnb.listingsAndReviews

Documents	Aggregations	Schema	Explain Plan	Index
<div> <div>FILTER</div> <div>PROJECT</div> <div>SORT</div> <div>COLLATION</div> </div> <div> <div>VIEW</div> <div></div> <div></div> <div></div> </div>				
<div> <div> <div>house_rules:{\$not: /no pet/i}</div> </div> <div> <div>house_rules:1</div> </div> </div>				
<div> <div> <div>_id: "1001265"</div> <div>house_rules: "The general welfare and well being of all the community."</div> </div> <div> <div>_id: "10021707"</div> <div>house_rules: ""</div> </div> <div> <div>_id: "10030955"</div> <div>house_rules: ""</div> </div> <div> <div>_id: "1003530"</div> <div>house_rules: "No smoking is permitted in the apartment. All towels that are used sho..."</div> </div> </div>				

- Propiedades que no permitan fumadores.

```
{
  filter: {
    house_rules: RegExp('no smoking', i)
  },
  project: {
    house_rules: 1
  }
}
```

sample_airbnb.listingsAndReviews

Documents	Aggregations	Schema	Explain Plan	Indexes
<div> <div>FILTER</div> <div>PROJECT</div> <div>SORT</div> <div>COLLATION</div> </div> <div> <div>VIEW</div> <div></div> <div></div> <div></div> </div>				
<div> <div>house_rules:/no smoking/i }</div> <div>house_rules:1</div> </div>				
<div> <div> <div>_id: "1003530"</div> <div>house_rules: "No smoking is permitted in the apartment. All towels that are used sho..."</div> </div> <div> <div>_id: "10083468"</div> <div>house_rules: ". No smoking inside the apartment. . Is forbidden receive or lead stra..."</div> </div> <div> <div>_id: "10084023"</div> <div>house_rules: "1. 禁止吸烟, 只限女生入住 (除得到批准) No smoking and only female is allowed 2. 热水澡是</div> </div> <div> <div>_id: "10091713"</div> </div> </div>				

- Propiedades que no permitan fiestas ni fumadores.

```
{
  filter: {
    $and: [
      {
        house_rules: RegExp('No Smoking', i)
      },
      {
        house_rules: RegExp('No Parties', i)
      }
    ]
  },
  project: {
    house_rules: 1
  }
}
```

sample_airbnb.listingsAndReviews

DOCUMENTS 5.6

Documents Aggregations Schema Explain Plan Indexes

FILTER

PROJECT

SORT

COLLATION

SKIP

VIEW

_id: "10392282"

house_rules: "No smoking, no pets, no parties. You are welcome to have guests, but ..."

_id: "10423504"

house_rules: "Guests should have Airbnb verification at time of booking. We expect g..."

_id: "10040938"

house_rules: "No parties or loud music after 10 No smoking inside Take care of my p..."

_id: "11100923"

house_rules: "NO PARTIES. NO SMOKING INSIDE. NO PETS. Respect the neighbors and keep..."

_id: "1117706"

house_rules: "Mature guests only! Please be respectful of all furniture and appliances..."

Reto 2

Usando la colección `sample_airbnb.listingsAndReviews`, agrega un filtro que permita obtener todas las publicaciones que tengan 50 o más comentarios, que la valoración sea mayor o igual a 80, que cuenten con conexión a Internet vía cable y estén ubicada en Brazil.

sample_airbnb.listingsAndReviews

DOCUMENTS 5.

Documents Aggregations Schema Explain Plan Indexes

FILTER

PROJECT

SORT

COLLATION

SKIP

ADD DATA

VIEW

_id: "1003530"

listing_url: "https://www.airbnb.com/rooms/1003530"

name: "New York City - Upper West Side Apt"

summary: ""

space: "Murphy bed, optional second bedroom available. Wifi available, Hulu, N..."

description: "Murphy bed, optional second bedroom available. Wifi available, Hulu, N..."

neighborhood_overview: "Great neighborhood - many terrific restaurants, bakeries, bagelries. W..."

notes: "My cat, Samantha, are in and out during the summer. The apt is layed ..."

transit: "Conveniently located near 1, 2, 3, B & C subway lines. Also buses on C..."

access: "New York City!"

interaction: ""

house_rules: "No smoking is permitted in the apartment. All towels that are used sho..."

property_type: "Apartment"

room_type: "Private room"

bed_type: "Real Bed"

minimum_nights: "12"

maximum_nights: "360"

cancellation_policy: "strict_14_with_grace_period"

last_scraped: 2019-03-07T05:00:00.000+00:00

calendar_last_scraped: 2019-03-07T05:00:00.000+00:00

first_review: 2013-04-29T04:00:00.000+00:00

last_review: 2018-08-12T04:00:00.000+00:00

FILTER

PROJECT

SORT

COLLATION

ADD DATA

VIEW

```
_id: "10038496"
listing_url: "https://www.airbnb.com/rooms/10038496"
name: "Copacabana Apartment Posto 6"
summary: "The Apartment has a living room, toilet, bedroom (suite) and American ..."
space: "The apartment has a living room, wash room, suite and an American kitc..."
description: "The Apartment has a living room, toilet, bedroom (suite) and American ..."
neighborhood_overview: "Copacabana in the South zone is the district that offers the greatest ..."
notes: ""
transit: "On the street there is plenty of transport and the subway station is n..."
access: "todo o espaço."
interaction: "Contact telephone numbers if needed: Valeria ((PHONE NUMBER HIDDEN) (U..."
house_rules: "Entreguem o imóvel conforme receberam e respeitem as regras do condomínio..."
property_type: "Apartment"
room_type: "Entire home/apt"
bed_type: "Real Bed"
minimum_nights: "3"
maximum_nights: "75"
cancellation_policy: "strict_14_with_grace_period"
last_scraped: 2019-02-11T05:00:00.000+00:00
```

sample [airbnb](#).listingsAndReviews

DOCUMENTS

Documents

Aggregations

Schema

Explain Plan

Indexes

FILTER

PROJECT

SORT

COLLATION

ADD DATA

VIEW

```
_id: "1001265"
listing_url: "https://www.airbnb.com/rooms/1001265"
name: "Ocean View Waikiki Marina w/prkg"
summary: "A short distance from Honolulu's billion dollar mall, and the same dis..."
space: "Great studio located on Ala Moana across the street from Yacht Harbor ..."
description: "A short distance from Honolulu's billion dollar mall, and the same dis..."
neighborhood_overview: "You can breath ocean as well as aloha."
notes: ""
transit: "Honolulu does have a very good air conditioned bus system."
access: "Pool, hot tub and tennis"
interaction: "We try our best at creating, simple responsive management which never ..."
house_rules: "The general welfare and well being of all the community."
property_type: "Condominium"
room_type: "Entire home/apt"
bed_type: "Real Bed"
minimum_nights: "3"
maximum_nights: "365"
cancellation_policy: "strict_14_with_grace_period"
last_scraped: 2019-03-06T05:00:00.000+00:00
calendar_last_scraped: 2019-03-06T05:00:00.000+00:00
first_review: 2013-05-24T04:00:00.000+00:00
last_review: 2019-07-07T05:00:00.000+00:00
```

sample [airbnb](#).listingsAndReviews

DOCUMENTS 5.61

Documents

Aggregations

Schema

Explain Plan

Indexes

Visualize

FILTER

PROJECT

SORT

COLLATION

ADD DATA

VIEW

```
_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 t..."
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 t..."
neighborhood_overview: "This charming ground floor flat is located in Horto, a quiet and bucol..."
notes: "There's a table in the living room now, that does not show in the phot..."
transit: "Easy access to transport (bus, taxi, car) and easy free parking around..."
access: ""
interaction: "I'll be happy to help you with any doubts, tips or any other informati..."
house_rules: "I just hope the guests treat the space as they're own, with respect to..."
property_type: "Apartment"
room_type: "Entire home/apt"
bed_type: "Real Bed"
minimum_nights: "2"
maximum_nights: "1125"
cancellation_policy: "flexible"
last_scraped: 2019-02-11T05:00:00.000+00:00
calendar_last_scraped: 2019-02-11T05:00:00.000+00:00
accommodates: 4
bedrooms: 1
```

```
{
  filter: {
    number_of_reviews: {
      $gte: 50
    },
    'review_scores.review_scores_rating': {
      $gte: 80
    },
    amenities: {
      $in: [
        RegExp('Ethernet')
      ]
    },
    'address.country': RegExp('brazil', i)
  }
}
```

sample_airbnb.listingsAndReviews

DOCUMENTS 5.6kTOTAL SIZE 90.0MB

DocumentsAggregationsSchemaExplain PlanIndexesValidation

FILTER {number_of_reviews:{\$gte:50}, "review_scores.review_scores_rating":{\$gte: 80},amenities:{\$in:[/ethernet/i]} , "address.c

PROJECT {name:1, number_of_reviews:1,review_scores:1, amenities:1, address:1}

SORT

COLLATION

MAX

SKIP 0

L

VIEW

Displaying c

_id: "1063491"

name: "Charming Apartment,perfect Location"

number_of_reviews: 110

amenities: Array

address: Object

review_scores: Object

_id: "11740322"

name: "*Cozy doble bedroom *Nearby Christ the Redeemer*"

number_of_reviews: 76

amenities: Array

address: Object

review_scores: Object

_id: "14996051"

name: "Best location near the beach at Posto 9"

number_of_reviews: 116

amenities: Array

Reto 3

Usando la colección *sample_airbnb.listingsAndReviews*, mediante el uso de agregaciones, encontrar el número de publicaciones que tienen conexión a Internet, sea desde Wifi o desde cable (Ethernet).

sample_airbnb.listingsAndReviews

DOCUMENTS 5.6kTOTAL SIZE 90.0MBAVG. SIZE 16.6KBBYTESINDEXES 4TOTAL SIZE 492.0KBAVG. SIZE 123.0KBBYTES

DocumentsAggregationsSchemaExplain PlanIndexesValidation

COLLATION

Untitled - Modified

SAVE

SAMPLE MODE

AUTO PREVIEW

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

_id: "10006546"

listing_url: "https://www.airbnb.com/rooms/10006546"

name: "Ribeira Charming Duplex"

summary: "Fantastic duplex apartment with three bedroom located in the histori..."

space: "Privileged views of the Douro River and Ribeira square, our apartment ..."

description: "Fantastic duplex apartment with three bed located in the histori..."

_id: "10009999"

listing_url: "https://www.airbnb.com/rooms/10009999"

name: "Horto flat with small garden"

summary: "One bedroom + sofa-bed in quiet a neighbourhood right next t..."

space: "Lovely one bedroom + sofa-bed in th perfect for two but ..."

description: "One bedroom + sofa-bed in qui neighbourhood right next t..."

\$group

Output after \$group stage (Sample of 1 document)

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

_id: null

total: 5308

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION Untitled- Modified SAVE SAMPLE MODE AUTO PREVIEW

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

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

```
{
  "_id": "10006546",
  "listing_url": "https://www.airbnb.com/rooms/10006546",
  "name": "Ribeira Charming Duplex",
  "summary": "Fantastic duplex apartment with three bedrooms 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 bedrooms located in the historical square, our apartment ..."
}
```

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

\$count Output after \$count stage (Sample of 1 document)

```
1 /**
2  * Provide the field name for the count.
3  */
4 {
5   'total'
6 }
```

```
{
  "total": 5303
}
```

Ejercicios

La base de datos y colección que debes usar es *sample_airbnb.listingsAndReviews*.

El ejercicio consiste en obtener todas las publicaciones que tengan 50 o más comentarios, que la valoración sea mayor o igual a 80, que cuenten con conexión a Internet vía cable y estén ubicadas en Brazil.

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION Untitled- Modified SAVE SAMPLE MODE AUTO PREVIEW

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

\$match Output after \$match stage (Sample of 6 documents)

```
1 /**
2  * query: The query in MQL.
3  */
4 {
5   number_of_reviews: {$gte: 50},
6   "review_scores.review_scores_rating": {$gte: 80},
7   amenities: {$in: ["Ethernet"]},
8   "address.country_code": "BR"
9 }
```

```
{
  "_id": "1063491",
  "listing_url": "https://www.airbnb.com/rooms/1063491",
  "name": "Charming Apartment, perfect Location",
  "summary": "Charmoso quarto e sala, privativo, finamente decorado, com uma delicio...",
  "space": "It is a bedroom and living room, charming, private, finely decorated, ...",
  "description": "It is a bedroom and living room, charming, private, finely decorated, ..."
}
```

```
{
  "_id": "11740322",
  "listing_url": "https://www.airbnb.com/rooms/11740322",
  "name": "★Cozy doble bedroom ★Nearby Christ Redeemer★",
  "summary": "Stay in a quiet place with great wifi access throughout...",
  "space": "The house was built in 1927 and is the Municipal Secretar...",
  "description": "Stay in a quiet place with great wifi access throughout..."
}
```

Documents

Aggregations

Schema

Explain Plan

Indexes

Validation

COLLATION

Untitled- Modified

SAVE

SAMPLE MODE

AUTO PREVIEW

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

_id: "10006546"

listing_url: "https://www.airbnb.com/rooms/10006546"

name: "Ribeira Charming Duplex"

summary: "Fantastic duplex apartment with three bedrooms located in the historical neighbourhood right next to the square, our apartment ..."

space: "Privileged views of the Douro River and Ribeira square, our apartment ..."

description: "Fantastic duplex apartment with three bedrooms located in the historical neighbourhood right next to the square, our apartment ..."

_id: "10009999"

listing_url: "https://www.airbnb.com/rooms/10009999"

name: "Horto flat with small garden"

summary: "One bedroom + sofa-bed in quiet neighbourhood right next to the square, our apartment ..."

space: "Lovely one bedroom + sofa-bed in the perfect for two but ..."

description: "One bedroom + sofa-bed in the perfect for two but ..."

\$match

Output after \$match stage (Sample of 6 documents)

```
1 /**
2  * query: The query in MQL.
3  */
4 {
5   number_of_reviews: {$gte:50},
6   "review_scores.review_scores_rating": {$gte: 80},
7   amenities: {$in: [/Ethernet/]},
8   "address.country": /brazil/i
9 }
```

suburb: "Copacabana"

government_area: "Copacabana"

market: "Rio De Janeiro"

country: "Brazil"

country_code: "BR"

location: Object

availability: Object

review_scores: Object

reviews: Array

_id: "11740322"

listing_url: "https://www.airbnb.com/rooms/11740322"

name: "★Cozy double bedroom ★Nearby Christ Redeemer★"

summary: "Stay in a quiet place with great wifi access throughout..."

space: "The house was built in 1927 and is the Municipal Secretariat..."

description: "Stay in a quiet place with great wifi access throughout..."