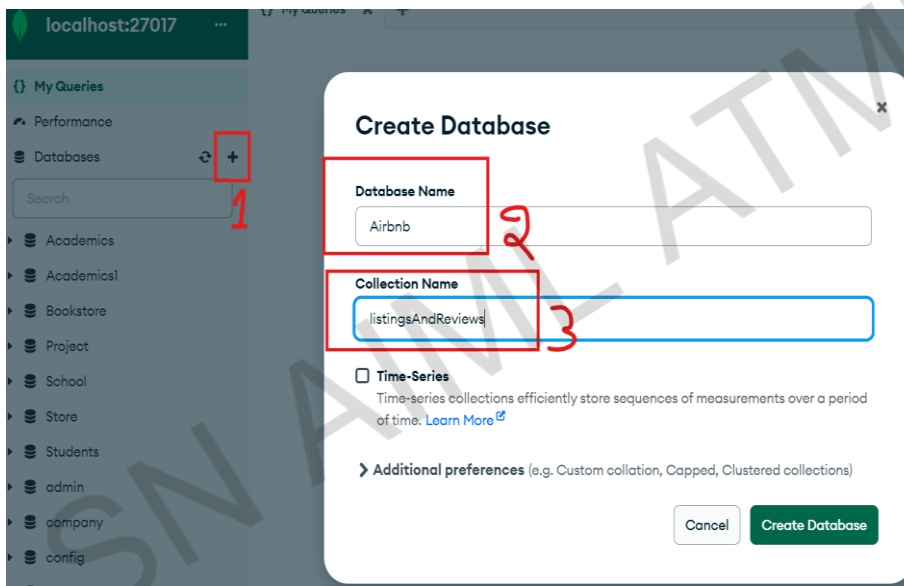


Program 7

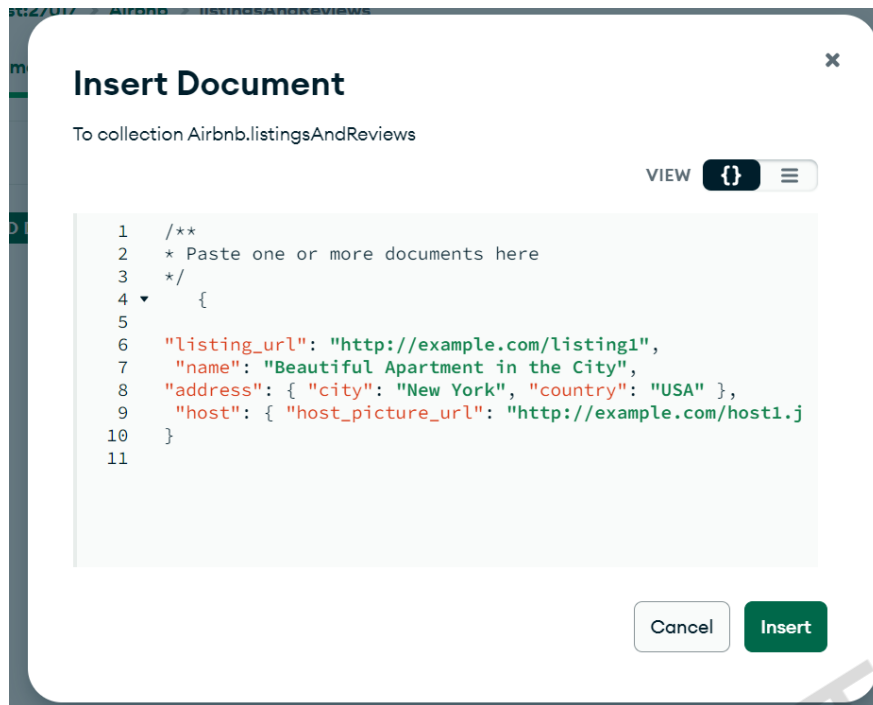
- Find all listings with `listing_url`, `name`, `address`, `host_picture_url` in the `listings` And `Reviews` collection that have a host with a picture url.

Create a database **Airbnb** and collection **listingsAndReviews** in Mongo IDE.

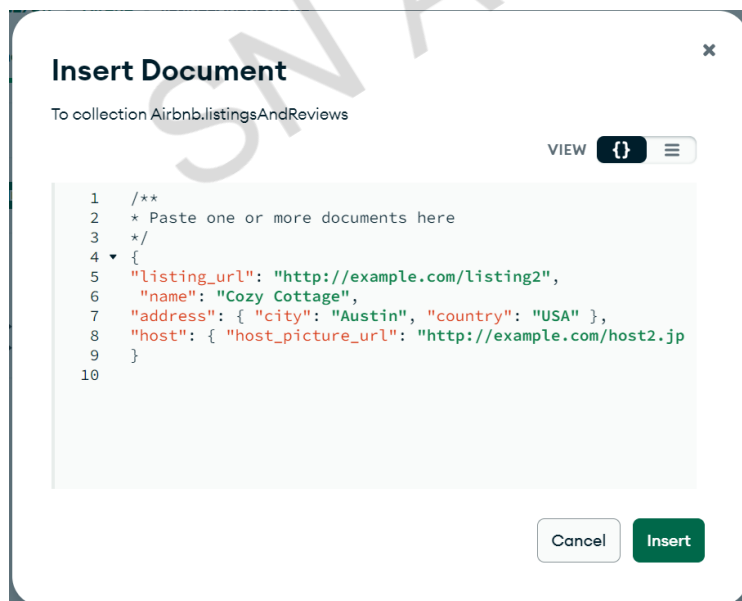


Add the following documents in the **listingsAndReviews** collection in MongoDB IDE.

```
{  
  "listing_url": "http://example.com/listing1",  
  "name": "Beautiful Apartment in the City",  
  "address": { "city": "New York", "country": "USA" },  
  "host": { "host_picture_url": "http://example.com/host1.jpg" }  
}
```



```
{
"listing_url": "http://example.com/listing2",
"name": "Cozy Cottage",
"address": { "city": "Austin", "country": "USA" },
"host": { "host_picture_url": "http://example.com/host2.jpg" }
}
```



In MongoDB Shell

>use Airbnb

```
db.listingsAndReviews.aggregate([  
  
  { $match: { "host.host_picture_url": { $exists: true, $ne: null } } },  
  
  {  
  
    $project: {  
  
      listing_url: 1,  
  
      name: 1,  
  
      address: 1,  
  
      host_picture_url: "$host.host_picture_url" }  
  
    })  
])
```

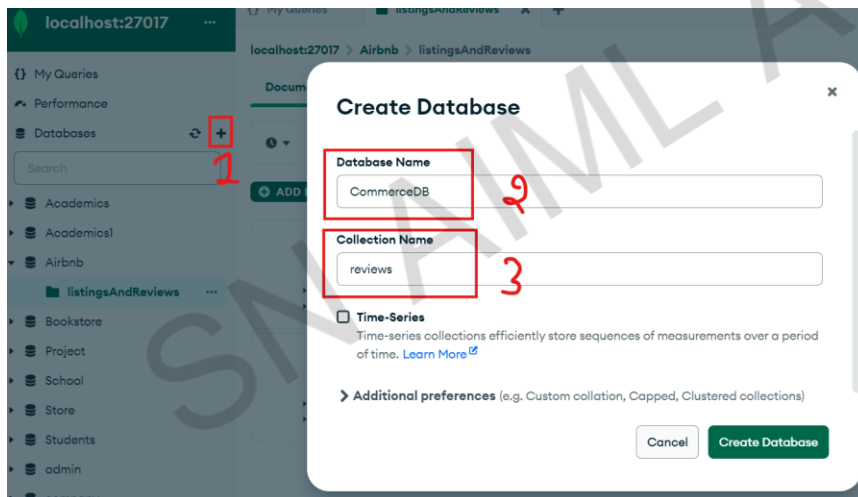
Output:

```
< {  
  _id: ObjectId('66722251c234660bcc7dd143'),  
  listing_url: 'http://example.com/listing1',  
  name: 'Beautiful Apartment in the City',  
  address: {  
    city: 'New York',  
    country: 'USA'  
  },  
  host_picture_url: 'http://example.com/host1.jpg'  
}
```

```
{
  _id: ObjectId('667222e4c234660bcc7dd145'),
  listing_url: 'http://example.com/listing2',
  name: 'Cozy Cottage',
  address: {
    city: 'Austin',
    country: 'USA'
  },
  host_picture_url: 'http://example.com/host2.jpg'
}
```

b. Using E-commerce collection write a query to display reviews summary.

Create a database **CommerceDB** and collection **reviews** in Mongo IDE.

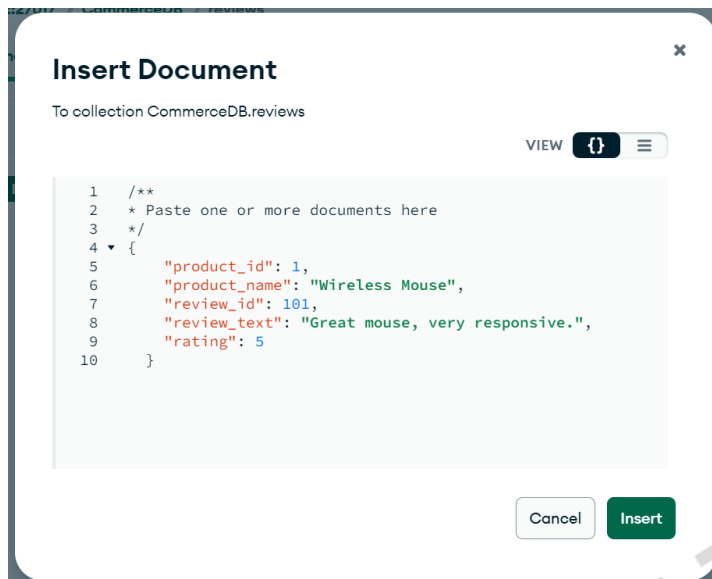


Add the following documents in the **reviews** collection in MongoDB IDE.

```
{
  "product_id": 1,
  "product_name": "Wireless Mouse",
  "review_id": 101,
  "review_text": "Great mouse, very responsive.",
}
```

"rating": 5

}



{

"product_id": 1,

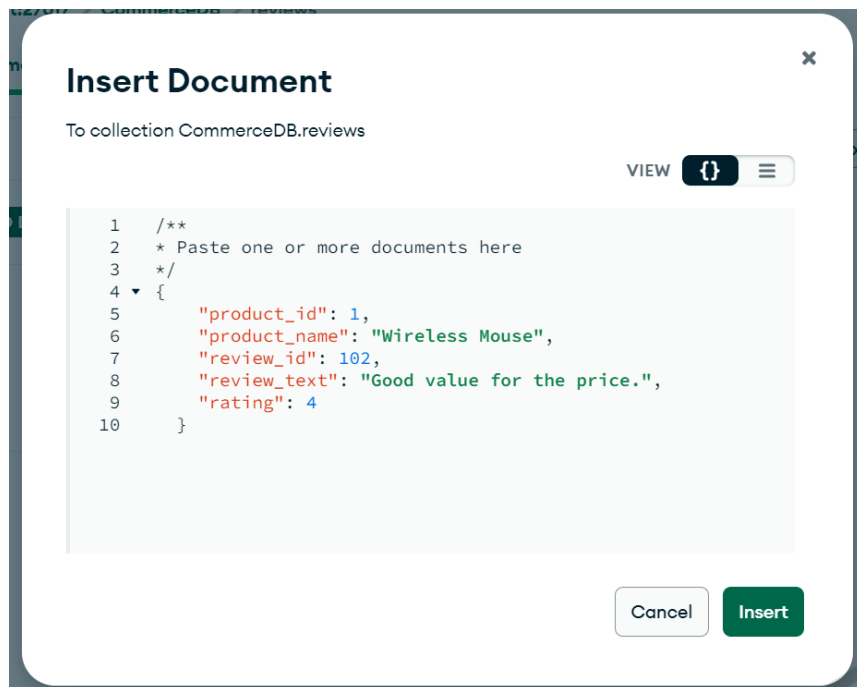
"product_name": "Wireless Mouse",

"review_id": 102,

"review_text": "Good value for the price.",

"rating": 4



}



```
{
  "product_id": 2,
  "product_name": "Bluetooth Keyboard",
  "review_id": 202,
  "review_text": "Compact and portable.",
  "rating": 4
}
```

Insert Document

To collection CommerceDB.reviews

VIEW  

```
1  /**
2  * Paste one or more documents here
3  */
4  {
5      "product_id": 2,
6      "product_name": "Bluetooth Keyboard",
7      "review_id": 202,
8      "review_text": "Compact and portable.",
9      "rating": 4
10 }
```



Cancel

Insert

```
{
  "product_id": 3,
  "product_name": "USB-C Hub",
  "review_id": 302,
  "review_text": "Works well with my laptop.",
  "rating": 5
}
```

Insert Document

To collection CommerceDB.reviews

VIEW  

```
1  /**
2  * Paste one or more documents here
3  */
4  {
5      "product_id": 3,
6      "product_name": "USB-C Hub",
7      "review_id": 302,
8      "review_text": "Works well with my laptop.",
9      "rating": 5
10  }
11  }
```

Cancel

Insert

In MongoShell

>use CommerceDB

Query to Display Reviews Summary

```
db.reviews.aggregate([
{
  $group: {
    _id: "$product_id",
    product_name: { $first: "$product_name" },
    total_reviews: { $sum: 1 },
    average_rating: { $avg: "$rating" },
    latest_reviews: {
      $push: {
```



```

        review_id: "$review_id",
        review_text: "$review_text",
        rating: "$rating",
    }
}
},
{
    $project: {
        product_id: "$_id",
        product_name: 1,
        total_reviews: 1,
        average_rating: "$average_rating",
        latest_reviews: {
            $slice: ["$latest_reviews", -3] // Adjust the number of latest reviews as needed
        }
    }
},
{
    $sort: { total_reviews: -1 } // Sort by total reviews in descending order
}
D)

```

Output:

```
< {
  _id: 1,
  product_name: 'Wireless Mouse',
  total_reviews: 2,
  product_id: 1,
  average_rating: 4.5,
  latest_reviews: [
    {
      review_id: 101,
      review_text: 'Great mouse, very responsive.',
      rating: 5
    },
    {
      review_id: 102,
      review_text: 'Good value for the price.',
      rating: 4
    }
  ]
}
```

```
{
  _id: 2,
  product_name: 'Bluetooth Keyboard',
  total_reviews: 1,
  product_id: 2,
  average_rating: 4,
  latest_reviews: [
    {
      review_id: 202,
      review_text: 'Compact and portable.',
      rating: 4
    }
  ]
}
```

```
{
  _id: 3,
  product_name: 'USB-C Hub',
  total_reviews: 1,
  product_id: 3,
  average_rating: 5,
  latest_reviews: [
    {
      review_id: 302,
      review_text: 'Works well with my laptop.',
      rating: 5
    }
  ]
}
```

SN AIML ATME

SN AIML ATME

SN AIML ATME