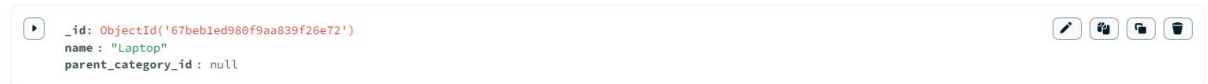
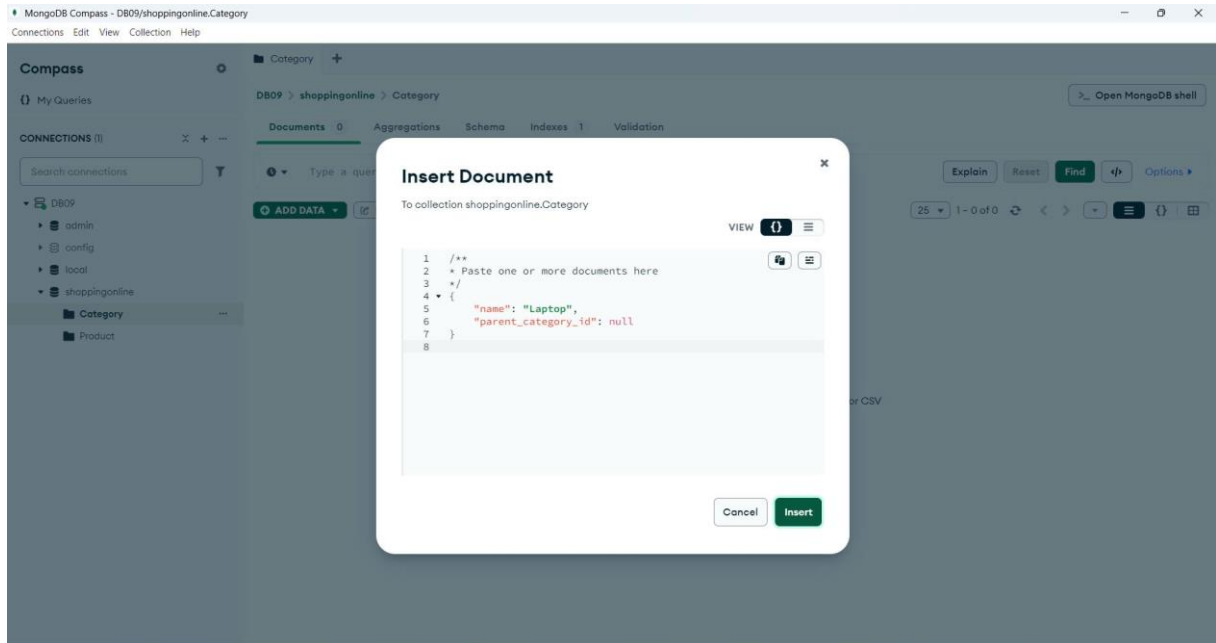


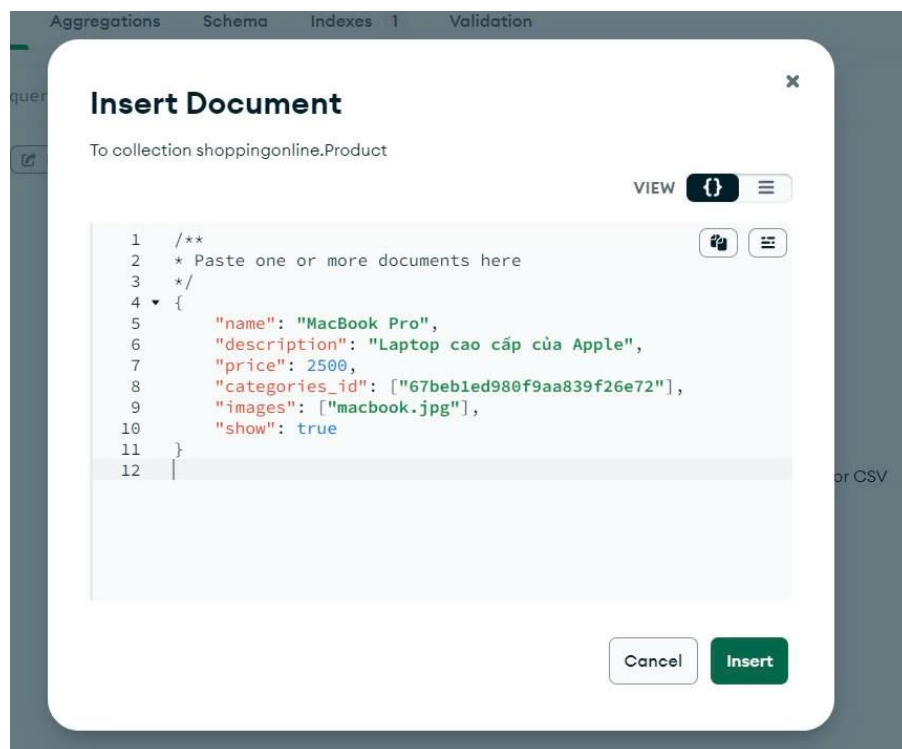
BÀI THỰC HÀNH BUỔI 5

Cho 1 cơ sở dữ liệu gồm category và product như hình bên. Hãy sử dụng Mongoose để quản lý CSDL trên và thực hiện các yêu cầu sau sau:

- Thêm 1 category mới



- Thêm 1 product mới



ADD DATA

EXPORT DATA

UPDATE

DELETE

```

_id: ObjectId('67beb3a7980f9aa839f26e7b')
name: "MacBook Pro"
description: "Laptop cao cấp của Apple"
price: 2500
categories_id: Array (1)
  0: "67bebled980f9aa839f26e72"
images: Array (1)
  0: "macbook.jpg"
show: true

```

- Sửa 1 category theo id

{ "_id": ObjectId("67bebled980f9aa839f26e72") }

Generate query

Explain

Reset

Find

ADD DATA

EXPORT DATA

UPDATE

DELETE

25 1-1 of 1

```

_id: ObjectId('67bebled980f9aa839f26e72')
name: "Laptop"
parent_category_id: null

```

Update 1 document

shoppingonline.Category

Filter

{ "_id": ObjectId('67bebled980f9aa839f26e72') }

Update

Learn more about Update syntax

```

1 {
2   "$set": {
3     "name": "Laptop Gaming"
4   }
5 }
6

```

Preview (sample of 1 document)

```

_id: ObjectId('67bebled980f9aa839f26e72')
name: "Laptop" "Laptop Gaming"
parent_category_id: null

```

★ Save

Cancel Update 1 document

Documents Aggregations Schema indexes validation

{ "_id": ObjectId("67bebled980f9aa839f26e72") }

Generate query

Explain

Reset

Find

Options

ADD DATA

EXPORT DATA

UPDATE

DELETE

25 1-1 of 1

```

_id: ObjectId('67bebled980f9aa839f26e72')
name: "Laptop Gaming"
parent_category_id: null

```

- Sửa 1 product theo id

Documents 1 Aggregations Schema Indexes 1 Validation

{ "_id": ObjectId("67beb3a7980f9aa839f26e7b") }

Generate query ⚡ Explain Reset Find </> Options ▶

ADD DATA EXPORT DATA UPDATE DELETE 25 1 - 1 of 1

```
{
  "_id": ObjectId('67beb3a7980f9aa839f26e7b')
  name: "MacBook Pro"
  description: "Laptop cao cấp của Apple"
  price: 2500
  categories_id: Array (1)
    0: "67beb1ed980f9aa839f26e72"
  images: Array (1)
    0: "macbook.jpg"
  show: true
}
```

Update 1 document

shoppingonline.Product

Filter 1

{ "_id": ObjectId('67beb3a7980f9aa839f26e7b') }

Update

Learn more about Update syntax

```
1 {
2   "$set": {
3     "name": "MacBook Pro M2",
4     "price": 2700
5   }
6 }
7
```

Preview (sample of 1 document)

```
{
  "_id": ObjectId('67beb3a7980f9aa839f26e7b')
  name: "MacBook Pro" "MacBook Pro M2"
  description: "Laptop cao cấp của Apple"
  price: 2500 2700
  categories_id: Array
  images: Array
  show: true
}
```

★ Save Cancel Update 1 document

Documents 1 Aggregations Schema Indexes 1 Validation

{ "_id": ObjectId("67beb3a7980f9aa839f26e7b") }

Generate query ⚡ Explain Reset Find </> Options ▶

ADD DATA EXPORT DATA UPDATE DELETE 25 1 - 1 of 1

```
{
  "_id": ObjectId('67beb3a7980f9aa839f26e7b')
  name: "MacBook Pro M2"
  description: "Laptop cao cấp của Apple"
  price: 2700
  categories_id: Array (1)
    0: "67beb1ed980f9aa839f26e72"
  images: Array (1)
    0: "macbook.jpg"
  show: true
}
```

- Xóa 1 product theo id

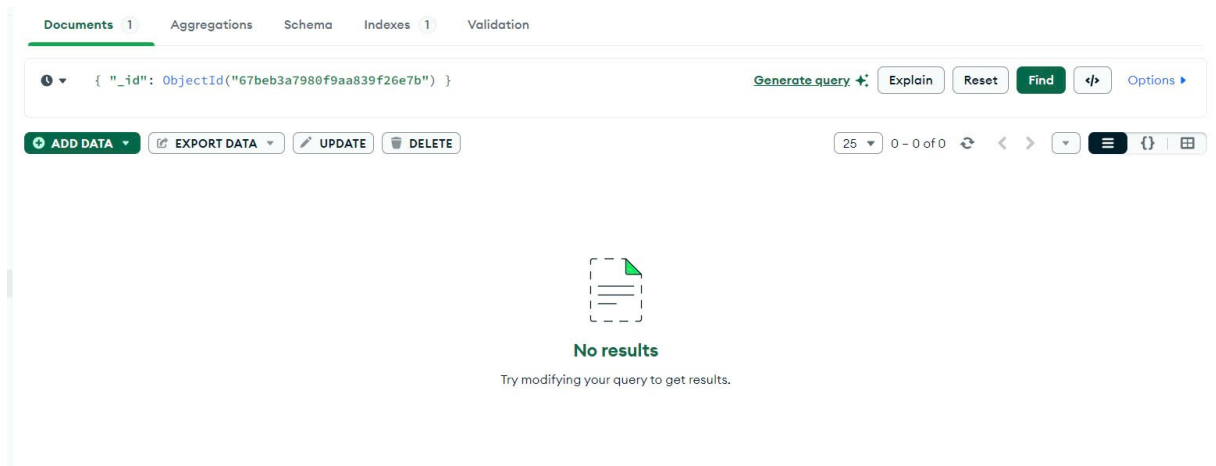
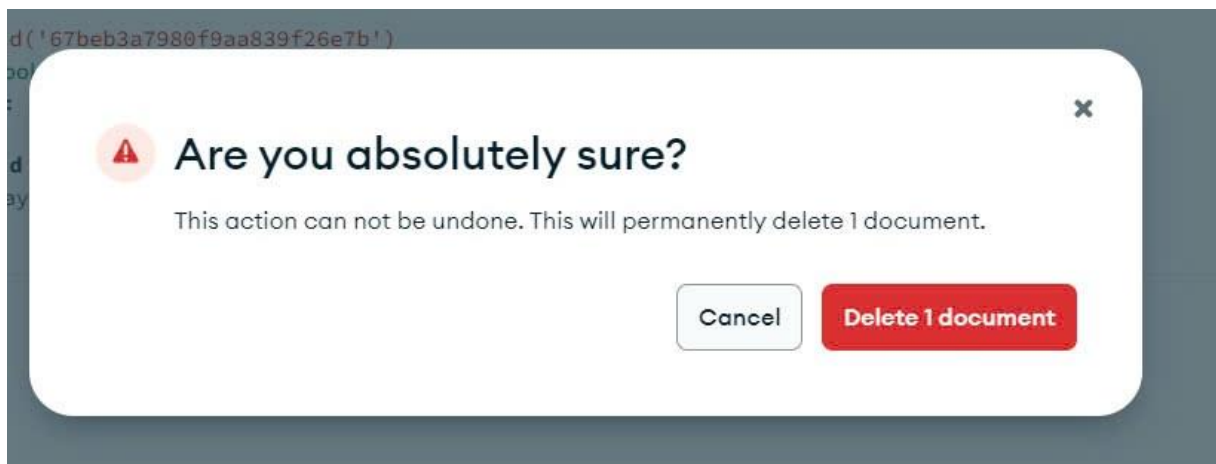
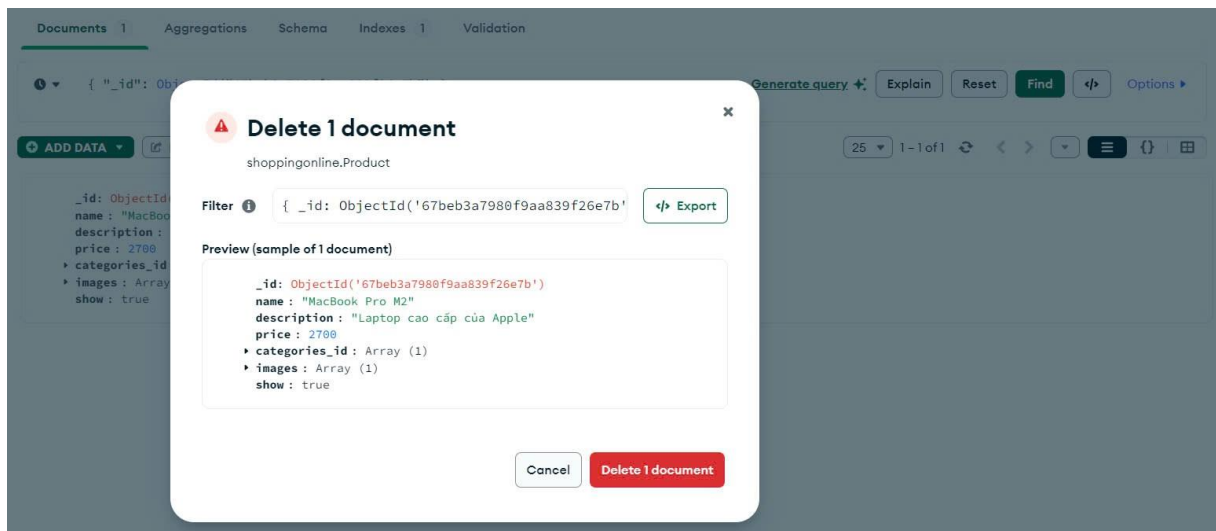
Documents 1 Aggregations Schema Indexes 1 Validation

{ "_id": ObjectId("67beb3a7980f9aa839f26e7b") }

Generate query ⚡ Explain Reset Find </> Options ▶

ADD DATA EXPORT DATA UPDATE DELETE 25 1 - 1 of 1

```
{
  "_id": ObjectId('67beb3a7980f9aa839f26e7b')
  name: "MacBook Pro M2"
  description: "Laptop cao cấp của Apple"
  price: 2700
  categories_id: Array (1)
  images: Array (1)
  show: true
}
```



- Xóa 1 category theo id (chỉ xóa khi category đó không có sản phẩm nào và không có category con nào).

DB09 > shoppingonline > Category Open MongoDB shell

Documents 1 Aggregations Schema Indexes 1 Validation

🔍 { "categories_id": "67beb1ed980f9aa839f26e72" } Generate query Explain Reset Find 🔗 Options

➕ ADD DATA 📄 EXPORT DATA ✎ UPDATE 🗑 DELETE 25 0 - 0 of 0 ↺ ↻ ⌵ ☰ { } 📄



No results

Try modifying your query to get results.

Documents 1 Aggregations Schema Indexes 1 Validation

🔍 { "parent_category_id": "67beb18b9b1560be1ba3fd7e" } Generate query Explain Reset Find 🔗 Options

➕ ADD DATA 📄 EXPORT DATA ✎ UPDATE 🗑 DELETE 25 0 - 0 of 0 ↺ ↻ ⌵ ☰ { } 📄



No results

Try modifying your query to get results.

Delete 1 document

shoppingonline.Category

Filter

None

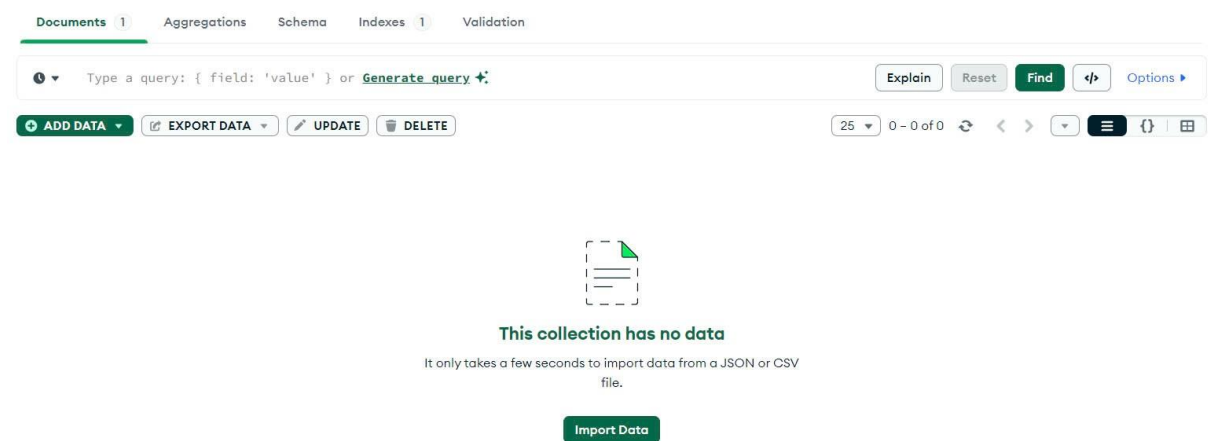
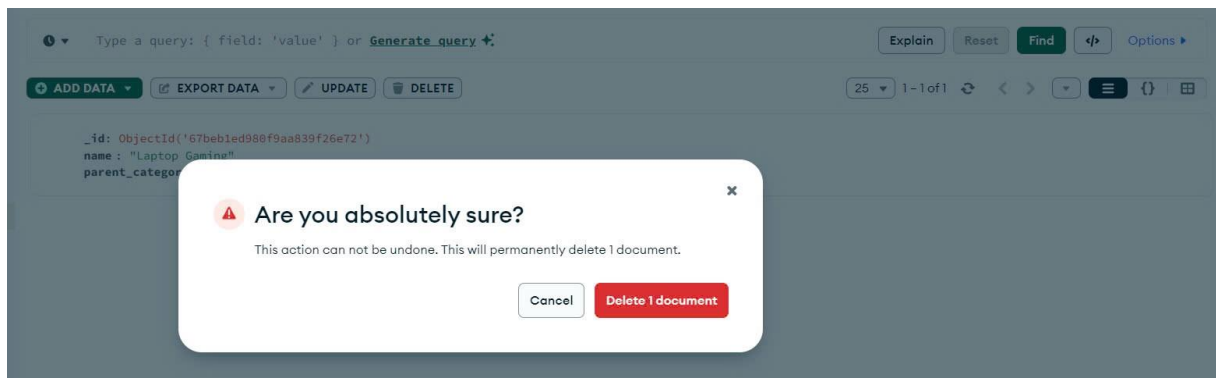
🔗 Export

Preview (sample of 1 document)

```
_id: ObjectId('67beb1ed980f9aa839f26e72')
name: "Laptop Gaming"
parent_category_id: null
```

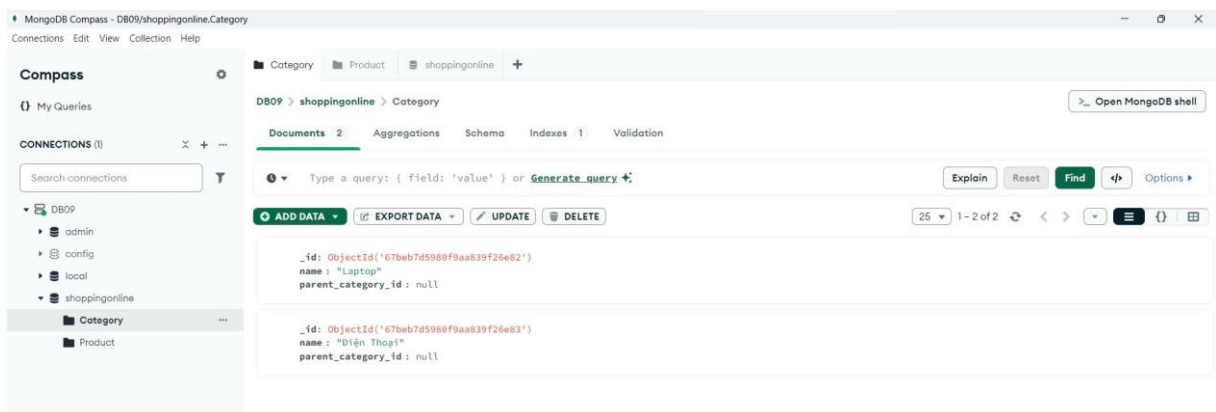
Cancel

Delete 1 document

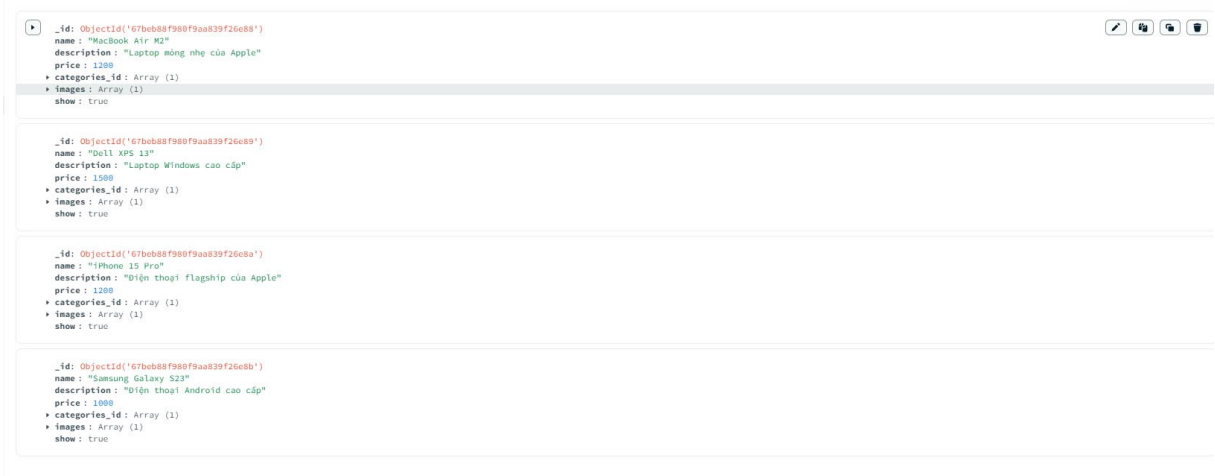


- Lấy danh sách các category (mỗi category trả về cần có thông tin đầy đủ của category con của nó nếu có).

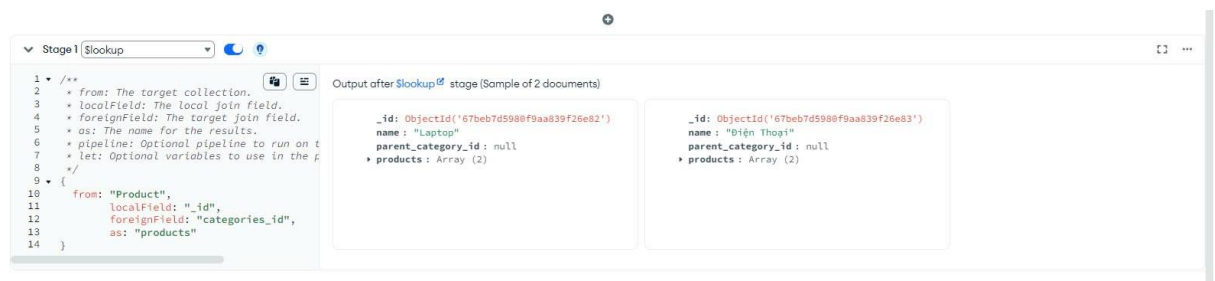
+ Thêm 2 sản phẩm category



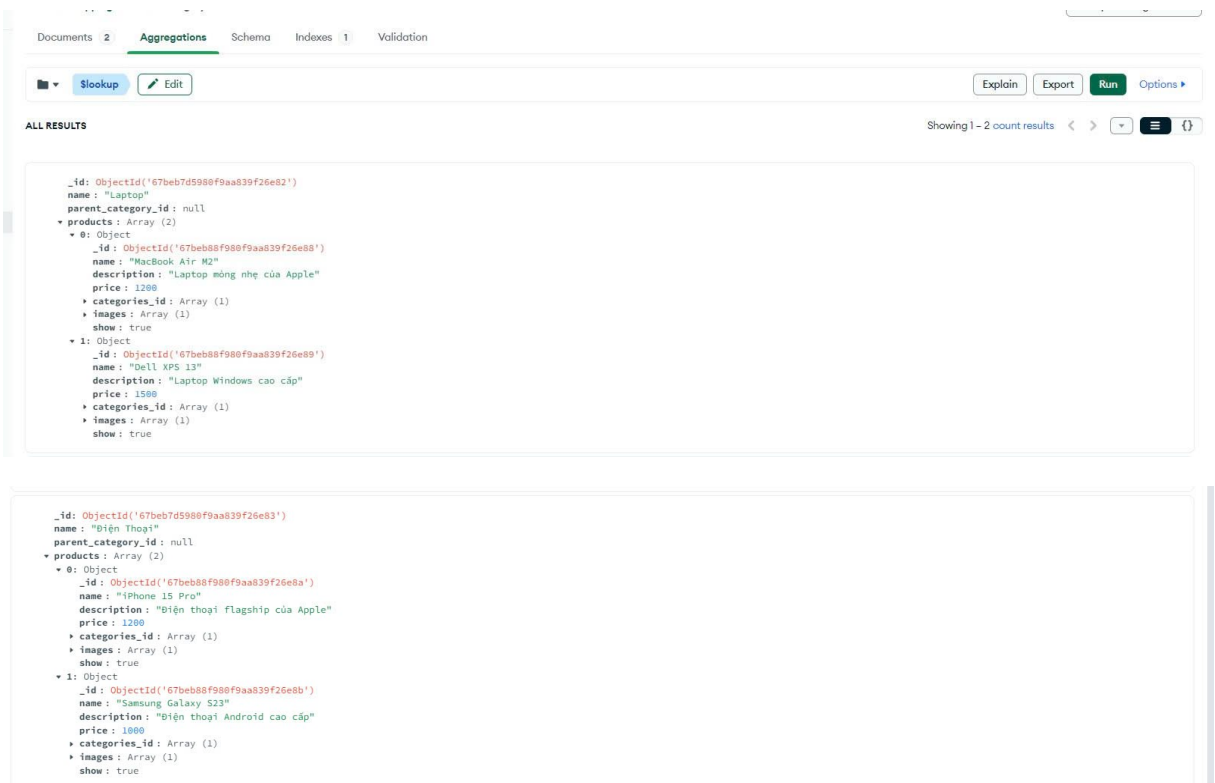
+ Thêm 4 data vào products



- Bước 1: Chọn collection "Category"
- Bước 2: Chuyển qua tab "Aggregations"
- Bước 3: Nhấn "ADD STAGE" và chọn "\$lookup"



- Bước 4: Nhấn “Run”



- Lấy danh sách các product

+ Nhập vào ô tìm kiếm: { }

+ Bấm “Find”

The screenshot shows the MongoDB Compass interface. At the top, the query field contains an empty set `{}`. The 'Find' button is highlighted. Below the query field, there are buttons for 'ADD DATA', 'EXPORT DATA', 'UPDATE', and 'DELETE'. The main area displays a list of documents, but it is currently empty, showing only the headers for each document structure.

- Tìm kiếm product theo tên

The screenshot shows the MongoDB Compass interface with a query `{ "name": "MacBook Air M2" }` entered in the query field. The 'Find' button is highlighted. The main area displays a list of documents, with the first document highlighted. The document structure is as follows:

```
{
  "_id": ObjectId("67beb88f980f9aa839f26e88"),
  "name": "MacBook Air M2",
  "description": "Laptop mỏng nhẹ của Apple",
  "price": 1200,
  "categories_id": Array (1),
  "images": Array (1),
  "show": true
}
```

- Tìm danh sách product theo catrgory

The screenshot shows the MongoDB Compass interface. On the left, the 'CONNECTIONS' panel shows a tree view with 'Product' selected. The main area displays a query `{ "categories_id": ObjectId("67beb7d5980f9aa839f26e81") }` entered in the query field. The 'Find' button is highlighted. The main area displays a list of documents, with the first document highlighted. The document structure is as follows:

```
{
  "_id": ObjectId("67beb88f980f9aa839f26e88"),
  "name": "MacBook Air M2",
  "description": "Laptop mỏng nhẹ của Apple",
  "price": 1200,
  "categories_id": Array (1),
  "images": Array (1),
  "show": true
}
```