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## Lab-10

Screenshots of all tasks of lab-10 :

testDB.students 9 1  
DOCUMENTS INDEXES

Documents Aggregations Schema **Indexes** Validation

Create Index Refresh VIEWING **INDEXES** SEARCH INDEXES

| Name and Definition | Type         | Size    | Usage                      | Properties |
|---------------------|--------------|---------|----------------------------|------------|
| > _id_              | REGULAR ⓘ    | 36.9 KB | 10 (since Tue Apr 02 2024) | UNIQUE ⓘ   |
| > location_2dsphere | GEOSPATIAL ⓘ | 8.2 KB  | 0 (since Tue Apr 02 2024)  |            |
| > name_text         | TEXT ⓘ       | 20.5 KB | 0 (since Tue Apr 02 2024)  |            |

testDB.students 10 1  
DOCUMENTS INDEXES

Documents Aggregations Schema Indexes Validation

Filter ⓘ { "name": "Bob Johnson" } ⓘ Generate query ⓘ Explain Reset Find ⓘ Options ▶

ADD DATA EXPORT DATA 1 - 1 of 1

```
{
  "_id": ObjectId("660be40c82bc705bb7bbf5cd"),
  "name": "Bob Johnson",
  "age": 21,
  "email": "bob.johnson@example.com"
}
```

Document flagged for deletion. CANCEL DELETE

> location\_2dsphere **GEOSPATIAL ⓘ** 8.2 KB 0 (since Tue Apr 02 2024)

testDB.students

91DOCUMENTSINDEXES

DocumentsAggregationsSchemaIndexesValidation

Pipeline

Sgroup

average

ExplainExportRunMore Options

Generate

Untitled - modifiedSAVECREATE NEWEXPORT TO LANGUAGEPREVIEWSTAGESTEXT

Stage 1Sgroup

```
1 {
2   _id: null,
3   average: {
4     $avg: "$age",
5   },
6 }
```

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

```
_id: null
average: 22.88888888888889
```

Add Stage

Learn more about aggregation pipeline stages

testDB.students

91DOCUMENTSINDEXES

DocumentsAggregationsSchemaIndexesValidation

Create IndexRefresh

VIEWINGINDEXESSearch Indexes

| Name and Definition | Type    | Size    | Usage                     | Properties |
|---------------------|---------|---------|---------------------------|------------|
| > _id_              | REGULAR | 36.9 KB | 8 (since Tue Apr 02 2024) | UNIQUE     |
| > name_text         | TEXT    | 20.5 KB | 0 (since Tue Apr 02 2024) |            |

Project{ field: 0 }

Sort{"age": -1}

Collation{ locale: 'simple' }

MaxTimeMS60000

Skip0

Limit0

ADD DATAEXPORT DATA

1 - 9 of 9

```
{
  "_id": "660be40c82bc705bb7bbf5d3",
  "name": "John Doe",
  "age": 35,
  "email": "john.doe@example.com"
}
```

```
{
  "_id": "660be40c82bc705bb7bbf5d4",
  "name": "James Brown",
  "age": 24,
  "email": "james.brown@example.com"
}
```

```
{
  "_id": "660be40c82bc705bb7bbf5d5",
  "name": "Emily Davis",
  "age": 23,
  "email": "emily.davis@example.com"
}
```

```
{
  "_id": "660be40c82bc705bb7bbf5d6",
  "name": "Alice Smith",
  "age": 22,
  "email": "alice.smith@example.com"
}
```

## Create Index



testDB.students

Index fields

location ▼

2dsphere ▼

+

➤ Options

Cancel

Create Index

## Create Database ✕

Database Name

testDB

Collection Name

☐ **Time-Series**

Time-series collections efficiently store sequences of measurements over a period of time. [Learn More](#)

➤ **Additional preferences** (e.g. Custom collation, Capped, Clustered collections)

**i** Before MongoDB can save your new database, a collection name must also be specified at the time of creation. [More Information](#)

Cancel

Create Database

## testDB.students

10  
DOCUMENTS1  
INDEXES

Documents Aggregations Schema Indexes Validation

Filter  Type a query: { field: 'value' } or [Generate query](#) 

Explain

Reset

Find

Options ADD DATA EXPORT DATA 

1 - 10 of 10



&lt;

&gt;



```
_id: ObjectId('660be40c82bc705bb7bbf5cb')
name: "John Doe"
age: 20
email: "john.doe@example.com"
```

```
_id: ObjectId('660be40c82bc705bb7bbf5cc')
name: "Alice Smith"
age: 22
email: "alice.smith@example.com"
```

```
_id: ObjectId('660be40c82bc705bb7bbf5cd')
name: "Bob Johnson"
age: 21
email: "bob.johnson@example.com"
```

```
_id: ObjectId('660be40c82bc705bb7bbf5ce')
name: "Emily Davis"
age: 23
email: "emily.davis@example.com"
```

```
_id: ObjectId('660be40c82bc705bb7bbf5cf')
name: "Michael Wilson"
```

## Insert Document

To collection testDB.students

VIEW  

```
1 [
2   {
3     "name": "John Doe",
4     "age": 20,
5     "email": "john.doe@example.com"
6   },
7   {
8     "name": "Alice Smith",
9     "age": 22,
10    "email": "alice.smith@example.com"
11  },
12  {
13    "name": "Bob Johnson",
14    "age": 21,
15    "email": "bob.johnson@example.com"
16  },
17  {
18    "name": "Emily Davis",
19    "age": 23,
20    "email": "emily.davis@example.com"
21  },
22  {
23    "name": "Michael Wilson",
24    "age": 19,
25    "email": "michael.wilson@example.com"
26  },
27  {
28    "name": "Sophia Martinez",
```

Cancel

Insert

✕

### Export File Type

CSV

Cancel

Export...

9 DOCUMENTS      1 INDEXES

Documents Aggregations **Schema** Indexes Validation

Filter    

Generate query     

```
Project { field: 0 }
```

Sort `{"age": -1}`

**Collation** { locale: 'simple' }

MaxTimeMS 60000

Skip 0

Limit 0

This report is based on a sample of 9 documents. [Learn more](#)

 Looking for data modeling tools?

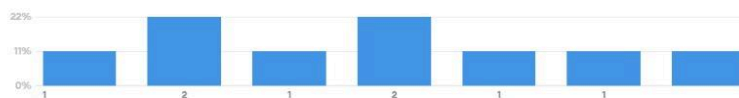
Check out Hackolade Studio. [🔗](#)

**\_id**  
objectid



inserted: 2024-04-02 10:55:08

**age**  
int32





## Create Database

Database Name

testDB

Collection Name

students

☐ Time-Series  
Time-series collections efficiently store sequences of measurements over a period of time. [Learn More](#)

Additional preferences

(e.g. Custom collation, Capped, Clustered collections)

Cancel

Create Database

testDB.students

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Documents

Aggregations

Schema

Indexes

Validation

Filter

{  
 "name": "John Doe"  
}

Generate query

Explain

Reset

Find

Options

ADD DATA

EXPORT DATA

1 - 1 of 1

1

2

3

4

\_id: ObjectId('660be40c82bc705bb7bbf5cb')

name: "John Doe"

age: 28

email: "john.doe@example.com"

ObjectId

String


Int32

String

CANCEL

UPDATE



Filter  


```
{
  "name": "John Doe"
}
```


 Generate query 

Explain



Reset




Find




Options 

 ADD DATA 

 EXPORT DATA 

1 - 1 of 1      



```
_id: ObjectId('660be48c82bc785bb7bbf5cb')
name: "John Doe"
age: 35
email: "john.doe@example.com"
```

