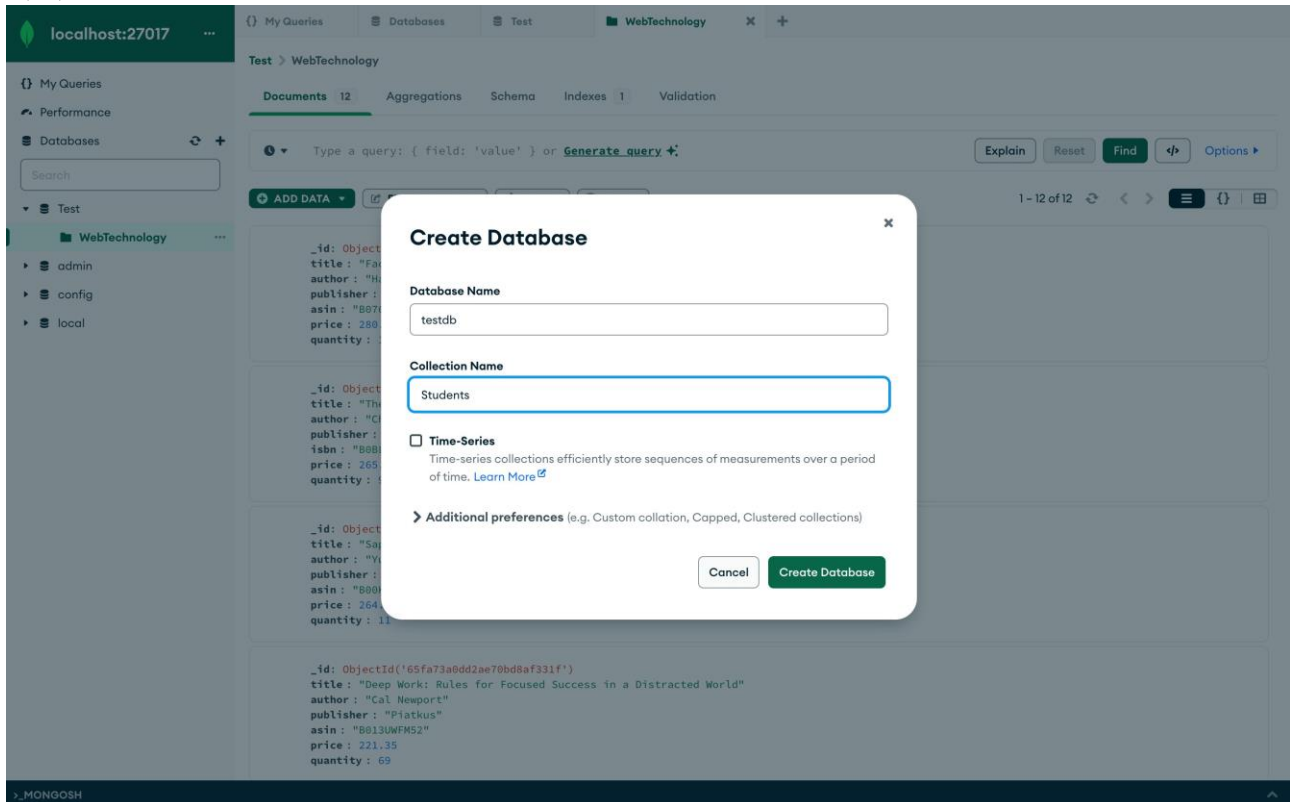


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WEB_TECH_ASSIGNMENT_LAB_10

1,2,3.



4.

The screenshot shows the MongoDB Compass interface for a local instance at localhost:27017. The 'Students' collection is selected, and the 'Documents' tab is active. A list of 11 documents is displayed, each containing fields for _id, Name, age, and E-mail. The documents are as follows:

_id	Name	age	E-mail
1	Sumit	20	sumitxyz
2	blu	11	blu@xyz
3	anshul	33	anshul@xyz
4	bulptrader	33	bulptrader
5	Samay	23	Samayxyz
6	Sunil	16	blonde@myhair
7	naruto	39	naruto@hokage
8	Tanmay	27	Tanmay@gmail.com
9	Jaby	17	Jaby@koay.com
10	Divya	19	Divya@gmail.com
11	Sensei	20	Sensei@xyz

5.

The screenshot shows the MongoDB Compass interface for a local instance at localhost:27017. The 'Students' collection is selected, and the 'Schema' tab is active. The schema details are as follows:

- _id**: ObjectId, indexed, unique. Inserted: 2024-03-20 05:02:54.
- age**: Int32, indexed. Histogram shows a distribution of ages from 1 to 39.
- E-mail**: String, indexed. Unique index. Values: blu@xyz, div@iya.com, blonde@myhair, samay@xyz.com, naruto@hokage, sumit@xyz, Riya@gmail.com, Jaby@koay.com, Tanmay@gmail.com, bulptrader, Sensei@xyz.
- Name**: String, indexed. Unique index. Values: Sensei, Sumit, Jaby, Divya, Samay, Sunil, naruto, blu, anshul, Riya, Tanmay.

6.

The screenshot shows the MongoDB Compass interface for the 'Students' collection. The left sidebar lists databases and collections. The main area shows a list of documents in the 'Documents' tab. A yellow banner at the bottom indicates 'Document modified' with 'CANCEL' and 'REPLACE' buttons.

Document	_id	Name	age	E-mail
1	...	Sumit	20	sumit@xyz
2	...	bla	21	bla@xyz
3	...	anshul	55	bull@trader
4	...	Samay	23	samay@xyz.com
5	...	Sunil	16	blonde@myhair
6	...	naruto	10	naruto@hokage
7	...	Tanmay	67	Tanmay@gmail.com

7.

The screenshot shows the MongoDB Compass interface with a 'Delete 3 documents' dialog box open. The dialog displays a filter '{ age: 20 }' and a preview of 3 documents matching the filter.

Document	_id	Name	age	E-mail
1	...	Sumit	20	sumit@xyz
2	...	Divya	20	div@iya.com
3	...	Sensei	20	Sensei@xyz

8.

The screenshot shows the MongoDB Compass interface for the 'Students' collection in the 'testdb' database. The 'Aggregations' tab is active, displaying a single stage named '\$group'. The stage configuration is as follows:

```

1 // **
2 * _id: The id of the group.
3 * field: The first field name.
4 */
5 {
6   _id: null,
7   avgscore: {
8     $avg: "$age"
9   }
10 }

```

The output of the aggregation stage is shown as a sample document:

```

{
  "_id": null,
  "avgscore": 28.909090909090909
}

```

Buttons for 'Generate aggregation', 'Explain', 'Export', 'Run', and 'Options' are visible at the top right of the aggregation stage. Below the stage configuration, there is a '+ Add Stage' button and a link to 'Learn more about aggregation pipeline stages'.

9.

The screenshot shows the MongoDB Compass interface for the 'Students' collection in the 'testdb' database. The 'Indexes' tab is active, displaying a table of existing indexes:

Name and Definition	Type	Size	Usage	Properties
Name_1	REGULAR	20.5 KB	0 (since Tue Apr 02 2024)	
id	REGULAR	34.9 KB	9 (since Tue Apr 02 2024)	UNIQUE

A 'Create Index' dialog box is open, showing the index name 'Name_1' and the index type 'REGULAR'. The dialog also includes a section for 'Index fields' with a dropdown menu showing 'Name' and a sort order dropdown showing '1 (asc)'. There are 'Cancel' and 'Create Index' buttons at the bottom of the dialog.

10.

The screenshot shows the MongoDB Compass interface. The 'Students' collection is selected in the 'testdb' database. The 'Export' dialog box is open, showing the collection name 'testdb.Students' and the export file type 'JSON'. The dialog also includes a 'Cancel' button and an 'Export...' button.

11.

The screenshot shows the MongoDB Compass interface with the 'Aggregations' tab active. A pipeline is defined with two stages: '\$sort' and '\$limit'. The output of the pipeline is shown, displaying a sample of 10 documents. The documents are sorted by age in descending order and limited to 10. The output shows the following documents:

```

{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Tanmay", "age": 67, "E-mail": "tanmay@gmail.com" }
{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Naruto", "age": 65, "E-mail": "naruto@hokage" }
{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Jabiy", "age": 47, "E-mail": "jabiy@kay.com" }
{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Samay", "age": 33, "E-mail": "samay@xyz.com" }
{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Bla", "age": 21, "E-mail": "bla@xyz" }
{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Sunil", "age": 16, "E-mail": "blonde@myhair" }
{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Naruto", "age": 10, "E-mail": "naruto@hokage" }
{ "_id": "65f4bfed02ae7b0dbaf3322", "Name": "Tanmay", "age": 7, "E-mail": "tanmay@gmail.com" }

```

The pipeline is defined as follows:

```

1 * {}
2 * Provide the number of documents to limit
3 * 10

```

The output of the pipeline is shown, displaying a sample of 10 documents. The documents are sorted by age in descending order and limited to 10. The output shows the following documents: