Write-up	Correctnessof program	Documentation of program	Viva	Timely Completion	Total	Dated sign of Subject Teacher
2	2	2	2	2	10	

Assignment No 3 (B)

Aim: Create four API using Node.JS, ExpressJS and MongoDB for CURD Operations on assignment 2.C.

Theory:

CURD Operations: -

CRUD (Create, Read, Update, Delete) operations allow work with the data stored in MongoDB.

The CRUD operation documentation is categorized in two sections:

Read Operations find and return documents stored within your MongoDB database.

Write Operations insert, modify, or delete documents in your MongoDB database.

Read Operations

Retrieve Data
You can use read operations to retrieve data from your MongoDB database. There are multiple types of read operations that access the data in different ways. If you want to request results based on a set of criteria from the existing set of data, you can use a find operation such as the find() or findOne() methods.

Aggregate

If you want to run a custom processing pipeline to retrieve data from your database, you can use the aggregate() method. This method accepts aggregation expressions to run in.

Write sequence. These expressions let you filter, group, and arrange the result data

from a collection Operations

Write Operations

Insert operation.

You can use MongoDB to retrieve, update and delete information. To perform any of those operations, that information, such as user profiles and orders, needs to exist in MongoDB. For that information to exist, you need to first perform an insert operation.

An insert operation inserts a single or multiple documents in MongoDB using the insertOne(), insertMany() and bulkWrite() methods.

Delete Operations

If you want to remove existing documents from a collection, you can use deleteOne() to remove one document or deleteMany() for one or more documents. These methods accept a query document that matches the documents you want to delete.

You can specify the document or documents to be deleted by the deleteOne() or deleteMany() write operations in a JSON object.

Update Operations

If you need to modify an array embedded within a document, you can use an array update operator in your update method call. In this guide, we explain and show examples on usage of these operators including:

- First array element match positional operator: $
- All array element match operator: $[]
- Filtered positional operator: $[<identifier>]

See the MongoDB server guide on Update Operators for a complete list.

Conclusion:

Thus we have studied, Create four API using Node.JS, ExpressJS and MongoDB for CURD Operations.