

# **Assignment: Creating a Database Using MongoDB and Mongosh**

## **Overview:**

In this assignment, you will demonstrate your understanding of MongoDB, a popular NoSQL database, and its command-line interface, Mongosh. You will create a simple database to store and manage data using MongoDB's flexible document-based structure.

## **Objective:**

The objective of this assignment is to familiarize yourself with MongoDB and its command-line interface, Mongosh, and to understand how to create, manage, and query databases and collections in MongoDB.

## **Assignment Details:**

**Database Setup:** Create a new MongoDB database called myDatabase.

**Collection Creation:** Create a collection named users within the myDatabase database.

**Document Insertion:** Insert at least three documents into the users collection, each representing a user with fields such as name, email, and age.

**Querying:** Write queries to retrieve:

All users from the users collection.

Users with an age greater than or equal to 30.

**Update Operation:** Update the age of a user with a specific email address.

**Deletion Operation:** Delete a user document based on a specific email address.

**Index Creation:** Create an index on the email field of the users collection.

## **Guidelines:**

Use Mongosh to perform all operations.

Ensure that your commands are correctly formatted and executed.

Use appropriate MongoDB query operators for querying and updating documents.

**Submission Requirements:**

Submit a text file containing the commands you used to complete the assignment.

Include comments in your file to explain each step and command.

**Assignment Criteria:**

Accuracy: The database, collection, and documents should be created accurately.

Querying: Queries should return the expected results.

Command Usage: Use correct MongoDB commands and query operators.

Documentation: Include clear and concise comments to explain each step.

**Conclusion:**

Through this assignment, you have gained practical experience in working with MongoDB and Mongosh. You have learned how to create databases, collections, insert documents, query data, and perform basic operations in MongoDB.