

Indexing Assignment -1

The `students` collection stores individual student records, including fields such as `name`, `major`, `gpa`, and `email`. This collection is used to manage student information and optimize queries for academic and administrative purposes.

Create a single-field index on the `name` field in the `students` collection and verify its creation.

Create a compound index on the `major` and `gpa` fields in the `students` collection and verify its creation.

Create a unique index on the `email` field in the `students` collection and verify its creation.

Remove duplicate entries from the `students` collection based on the `email` field.

Drop the unique index on the `email` field and verify its removal.

Drop the compound index on the `major` and `gpa` fields and verify its removal.

Retrieve and print the index statistics for the `students` collection.

Indexing Assignment -2

The `students_club` collection contains records of student club memberships, including details such as club names, member counts, and student email addresses.

Create a single-field index on the `club_name` field in the `students_club` collection and verify its creation.

Create a compound index on the `club_name` and `member_count` fields in the `students_club` collection and verify its creation.

Create a unique index on the `email` field in the `students_club` collection and verify its creation.

Remove duplicate entries from the `students_club` collection based on the `email` field.

Drop the unique index on the `email` field and verify its removal.

Drop the compound index on the `club_name` and `member_count` fields and verify its removal.

Retrieve and print the index statistics for the `students_club` collection.