

ASSIGNMENT 13

Aim : Execute atleast 10 queries on above MongoDB database that demonstrates following querying techniques :

- Find
- Find One (specific values)
- Conditional queries (Query conditionals, OR, \$not, conditional semantics)
- Type specific queries (null, regular expression, querying arrays)

Problem statement : Execute atleast 10 queries on above MongoDB database that demonstrates querying techniques.

Objective : • To understand MongoDB retrieval commands
• To implement the concept of document oriented databases.

Theory : When we retrieve a document from MongoDB collection it always adds a id field in the every document which contain unique id field.

Object Id (< hexadecimal >)

Returns a new ObjectId value. The 12 byte Object Id value consists of :

- 4-byte value representing the seconds since the UNIX epoch
- 3-byte machine identifier, 2-byte process id and
- 3-byte counter starting with random value

1) Retrieve a collection in MongoDB using Find command
`db.Teacher.find()`

2) Retrieve a document from collection in MongoDB using Find command using condition
`db.Teacher_info.find({sal : 25000})`

- 3) Retrieve a document from collection using Find command using OR operator
`db.Teacher-info.find({$or: [{status: "A"}, {sal: 5000}]})`
- 4) Retrieve a document from collection using Find command using greater than, less than, greater than and equal to, less than and equal to operator
`db.Teacher-info.find({sal: {$gt: 40000}})`
`db.media.find({Released: {$gt: 2000}}, {"last": 0})`
`db.media.find({Released: {$gte: 1999}}, {"last": 0})`
`db.media.find({Released: {$lte: 1999}}, {"last": 0})`
`db.media.find({Released: {$lt: 1999}}, {"last": 0})`
- 5) Retrieve a value from document which contains array field
 - Exact match on array
`db.inventory.find({tags: ['fruit', 'food', 'citrus']})`
 - Match an Array Element
`db.inventory.find({tags: 'fruit'})`
 - Match a specific element of an array
`db.inventory.find({tags: 0: 'fruit'})`
- 6) MongoDB provides a `db.collection.findOne()` method as a special case of `find()` that returns a single document
- 7) Retrieve a collection in MongoDB using Find command and pretty appearance
`db.<collection>.find().pretty()`

Conclusion : Understood to implement data from MongoDB database with the help of statements and operators.