

BDA

LAB ASSIGNMENT - 2

AIM:- To execute any 10 queries on suitable sample mongoddb database to demonstrate various query

OBJECTIVE:- To study and execute Mongoddb index - To study & execute aggregate functions of mongoddb

THEORY:- Explain different aggregation pipeline operators

① Stages Operators:-

\$project :- Passes along documents with and specified fields to next stage in pipeline.

\$match :- Filters documents based on material of specified conditions to next pipeline stage.

\$group :- groups document by some specific expression of groups documents for distinct grouping id fields contains distinct group by key.

② Set Operators:-

\$set equal :- compares b/w two or more arrays & return true 'b' same distinct element else false.

\$set information :- \$set union \$set difference same as set operations.

\$set subset :- 2 args :- returns true when first array is subset of second or even if first array equal second.

\* Explain type of indices in Mongoddb:-

① single field :- use to create index on single field of docu.

② compound index :- Mongoddb supports user defined index on multiple fields.

③ Multikey index :- Mongoddb uses the multikey index to index the values stored in array.



- ④ GeoSpatial index :- supports 2D & 2D sphere index  
2-D uses planar geometry whereas other uses spherical geometry.
- ⑤ Text index :- supports searching of string content collection.

\* INPUT :- Sample collection

\* OUTPUT :- Execution of all commands.

\* CONCLUSION :- Successfully performed all queries.

FAQ'S =

Q.1 Which pipeline operator is similar to where and having in mongo db?

→ where ~ \$where

having ~ \$group <criteria>

\$then \$match <criteria>

Q.2 how do you know which indices are defined over a collection?

use :- db.collection.getIndexes() method to know index defined.

Q.3 What is application of \$unwind in mongo db?  
used to deconstruct an array field in a document and create separate document for each item in an array.