PRACTICAL NO : 10

Problem Statement : Implement aggregation and indexing with suitable example using mongodb

test> show dbs

admin 40.00 KiB

comp 40.00 KiB

config 108.00 KiB

local 72.00 KiB

mydb 120.00 KiB

test> use comp

switched to db comp

comp> db.createCollection("employee")

{ ok: 1 }

comp> db.employee.insertMany([{id:101,name:"Siddhi",city:"Pune",age:20,salary:25000},{id:102,name:"Bhagyashri",city:"Mumbai",age:20,salary:30000},{id:103,name:"Shraddha",city:"Karnataka",age:21,salary:40000},{id:104,name:"Shravan",city:"Mumbai",age:30,salary:25000},{id:105,name:"Akshay",city:"Delhi",age:30,salary:28000},{id:106,name:"Kiran",city:"Pune",age:28,salary:35000}])

{

acknowledged: true,

insertedIds: {

'0': ObjectId("65394262bf38a4d8b8ebdb2c"),

'1': ObjectId("65394262bf38a4d8b8ebdb2d"),

'2': ObjectId("65394262bf38a4d8b8ebdb2e"),

'3': ObjectId("65394262bf38a4d8b8ebdb2f"),

'4': ObjectId("65394262bf38a4d8b8ebdb30"),

'5': ObjectId("65394262bf38a4d8b8ebdb31")

}

}

comp> db.employees.find()

comp> db.employee.find()

[

{

\_id: ObjectId("653941d8c519facc3fa9c5ec"),

id: 101,

name: 'Siddhi',

city: 'Pune',

age: 20,

salary: 25000

},

{

\_id: ObjectId("653941d8c519facc3fa9c5ed"),

id: 102,

name: 'Bhagyashri',

city: 'Mumbai',

age: 20,

salary: 30000

},

{

\_id: ObjectId("653941d8c519facc3fa9c5ee"),

id: 103,

name: 'Shraddha',

city: 'Karnataka',

age: 21,

salary: 40000

},

{

\_id: ObjectId("653941d8c519facc3fa9c5ef"),

id: 104,

name: 'Shravan',

city: 'Mumbai',

age: 30,

salary: 25000

},

{

\_id: ObjectId("653941d8c519facc3fa9c5f0"),

id: 105,

name: 'Akshay',

city: 'Delhi',

age: 30,

salary: 28000

},

{

\_id: ObjectId("653941d8c519facc3fa9c5f1"),

id: 106,

name: 'Kiran',

city: 'Pune',

age: 28,

salary: 35000

},

{

\_id: ObjectId("65394262bf38a4d8b8ebdb2c"),

id: 101,

name: 'Siddhi',

city: 'Pune',

age: 20,

salary: 25000

},

{

\_id: ObjectId("65394262bf38a4d8b8ebdb2d"),

id: 102,

name: 'Bhagyashri',

city: 'Mumbai',

age: 20,

salary: 30000

},

{

\_id: ObjectId("65394262bf38a4d8b8ebdb2e"),

id: 103,

name: 'Shraddha',

city: 'Karnataka',

age: 21,

salary: 40000

},

{

\_id: ObjectId("65394262bf38a4d8b8ebdb2f"),

id: 104,

name: 'Shravan',

city: 'Mumbai',

age: 30,

salary: 25000

},

{

\_id: ObjectId("65394262bf38a4d8b8ebdb30"),

id: 105,

name: 'Akshay',

city: 'Delhi',

age: 30,

salary: 28000

},

{

\_id: ObjectId("65394262bf38a4d8b8ebdb31"),

id: 106,

name: 'Kiran',

city: 'Pune',

age: 28,

salary: 35000

}

]

comp> db.employee.aggregate([{$match:{salary:{$gt:25000}}},{$project:{\_id:0,name:1,comp> db.employee.aggregate([{$match:{salary:{$gt:25000}}},{$project:{\_id:0,name:1,city:1}}])

[ { name: 'Bhagyashri', city: 'Mumbai' },

{ name: 'Bhagyashri', city: 'Mumbai' },

{ name: 'Shraddha', city: 'Karnataka' },

{ name: 'Akshay', city: 'Delhi' },

{ name: 'Kiran', city: 'Pune' },mbai' },

{ name: 'Bhagyashri', city: 'Mumbai' },

{ name: 'Shraddha', city: 'Karnataka' },

{ name: 'Akshay', city: 'Delhi' },

{ name: 'Kiran', city: 'Pune' }

]

comp> db.employee.aggregate([{$group:{\_id:"$city"}},{$sort:{\_id:-1}}])

[

{ \_id: 'Pune' },

{ \_id: 'Mumbai' },

{ \_id: 'Karnataka' },

{ \_id: 'Delhi' },

{ \_id: 'Mumbai' }

]

comp> db.employee.aggregate([{$match:{salary:{$gt:25000}}},{$project:{\_id:0,name:1,city:1}}])

[

{ name: 'Bhagyashri', city: 'Mumbai' },

{ name: 'Shraddha', city: 'Karnataka' },

{ name: 'Akshay', city: 'Delhi' },

{ name: 'Kiran', city: 'Pune' },

{ name: 'Bhagyashri', city: 'Mumbai' },

{ name: 'Shraddha', city: 'Karnataka' },

{ name: 'Akshay', city: 'Delhi' },

{ name: 'Kiran', city: 'Pune' }

]

comp> db.employee.aggregate([{$sort:{salary:1}},{$project:{\_id:0,name:1,salary:1}},{$limit:3}])

[ { name: 'Siddhi', salary: 25000 },

{ name: 'Siddhi', salary: 25000 },

{ name: 'Siddhi', salary: 25000 },

{ name: 'Shravan', salary: 25000 }

]

comp> db.employee.aggregate([{$sort:{salary:1}},{$project:{\_id:0,name:1,salary:1}}])

[

{ name: 'Siddhi', salary: 25000 },

{ name: 'Shravan', salary: 25000 },

{ name: 'Siddhi', salary: 25000 },

{ name: 'Shravan', salary: 25000 },

{ name: 'Akshay', salary: 28000 },

{ name: 'Akshay', salary: 28000 },

{ name: 'Bhagyashri', salary: 30000 },

{ name: 'Bhagyashri', salary: 30000 },

{ name: 'Kiran', salary: 35000 },

{ name: 'Kiran', salary: 35000 },

{ name: 'Shraddha', salary: 40000 },

{ name: 'Shraddha', salary: 40000 }

]