

PRACTICAL-5

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ROLL NO.-L037

ADBMS

```
db["MovieDetails"].find()
{
  _id: '01001',
  city: 'AGAWAM',
  loc: [
    -72.622739,
    42.070206
  ],
  pop: 15338,
  state: 'MA'
}
{
  _id: '01002',
  city: 'CUSHMAN',
  loc: [
    -72.51565,
    42.377017
  ],
  pop: 36963,
  state: 'MA'
}
{
  _id: '01005',
  city: 'BARRE',
  loc: [
    -72.108354,
    42.409698
  ],
  pop: 15338,
  state: 'MA'
}
```

```
> db.MovieDetails.find({"pop":{"$lte":20000}},{"_id":1})
{
  _id: '01001'
}
{
  _id: '01005'
}
{
  _id: '01007'
}
{
  _id: '01008'
}
{
  _id: '01010'
}
{
  _id: '01011'
}
{
  _id: '01012'
}
{
  _id: '01022'
}
{
  _id: '01026'
}
{
  _id: '01027'
```

```

    Type "it" for more
> db.MovieDetails.find({"pop":{"$lte":20000}},{"_id":0})
< {
  city: 'AGAWAM',
  loc: [
    -72.622739,
    42.070206
  ],
  pop: 15338,
  state: 'MA'
}
{
  city: 'BARRE',
  loc: [
    -72.108354,
    42.409698
  ],
  pop: 4546,
  state: 'MA'
}
{
  city: 'BELCHERTOWN',
  loc: [
    -72.410953,
    42.275103
  ],
  pop: 10579,

```

```
> db.MovieDetails.find({"pop":{"$lte":30000,"$gt":10000}},{"_id":1})
{
  _id: '01001'
}
{
  _id: '01007'
}
{
  _id: '01013'
}
{
  _id: '01027'
}
{
  _id: '01028'
}
{
  _id: '01030'
}
{
  _id: '01056'
}
{
  _id: '01060'
}
{
  _id: '01075'
```

```

Type - ? for more
> db.MovieDetails.find({"pop":{"$lte":30000,"$gt":10000}},{"_id":0})
{
  city: 'AGAWAM',
  loc: [
    -72.622739,
    42.070206
  ],
  pop: 15338,
  state: 'MA'
}
{
  city: 'BELCHERTOWN',
  loc: [
    -72.410953,
    42.275103
  ],
  pop: 10579,
  state: 'MA'
}
{
  city: 'CHICOPEE',
  loc: [
    -72.607962,
    42.162046
  ],
  pop: 10579,
  state: 'MA'
}

```

```

> db.MovieDetails.find({"pop": {"$gt": 30000}, "loc.0": {"$gt": -72}}, {"city": 1, "_id": 0})
{
  city: 'FITCHBURG'
}
{
  city: 'LEOMINSTER'
}
{
  city: 'FRAMINGHAM'
}
{
  city: 'MARLBOROUGH'
}
{
  city: 'NATICK'
}
{
  city: 'WOBURN'
}
{
  city: 'LAWRENCE'
}
{
  city: 'METHUEN'
}
{
  city: 'LOWELL'
}

```

```
db.MovieDetails.find({"state": {"$ne": "MA"}}, {"city": 1, "state": 1, "_id": 0})
{
  city: 'ASHAWAY',
  state: 'RI'
}
{
  city: 'BARRINGTON',
  state: 'RI'
}
{
  city: 'BLOCK ISLAND',
  state: 'RI'
}
{
  city: 'BRADFORD',
  state: 'RI'
}
{
  city: 'BRISTOL',
  state: 'RI'
}
{
  city: 'RICHMOND',
  state: 'RI'
}
{
  city: 'CHARLESTOWN',
  state: 'RI'
}
```

```
> db.MovieDetails.find({"state": {"$ne": "MA"}}, {"city": 1, "state": 1, "_id": 1})
{
  _id: '02804',
  city: 'ASHAWAY',
  state: 'RI'
}
{
  _id: '02806',
  city: 'BARRINGTON',
  state: 'RI'
}
{
  _id: '02807',
  city: 'BLOCK ISLAND',
  state: 'RI'
}
{
  _id: '02808',
  city: 'BRADFORD',
  state: 'RI'
}
{
  _id: '02809',
  city: 'BRISTOL',
  state: 'RI'
}
```

```
> db.MovieDetails.find({"state": {"$in": ["MA", "CA", "TX"]}}, {"_id": 0, "city": 1, "state": 1})
{
  city: 'AGAWAM',
  state: 'MA'
}
{
  city: 'CUSHMAN',
  state: 'MA'
}
{
  city: 'BARRE',
  state: 'MA'
}
{
  city: 'BELCHERTOWN',
  state: 'MA'
}
{
  city: 'BLANDFORD',
  state: 'MA'
}
{
  city: 'BRIMFIELD',
  state: 'MA'
}
{
```

```
}, {"_id": 0, "city": 1, "state": 1})
db.MovieDetails.find({"state": {"$in": ["MA", "CA", "TX"]}}, {"_id": 0, "city": 1, "state": 1})
{
  city: 'AGAWAM',
  state: 'MA'
}
{
  city: 'CUSHMAN',
  state: 'MA'
}
{
  city: 'BARRE',
  state: 'MA'
}
{
  city: 'BELCHERTOWN',
  state: 'MA'
}
{
  city: 'BLANDFORD',
  state: 'MA'
}
{
  city: 'BRIMFIELD',
  state: 'MA'
}
{
  city: 'CHESTER',
  state: 'MA'
}
{
```

```
db.MovieDetails.find({"$or": [
  {"pop": {"$gt": 50000}},
  {"loc.0": {"$gt": -71}}]})
```

```
{
  _id: '01201',
  city: 'PITTSFIELD',
  loc: [
    -73.247088,
    42.453086
  ],
  pop: 50655,
  state: 'MA'
}
```

```
{
  _id: '01701',
  city: 'FRAMINGHAM',
  loc: [
    -71.425486,
    42.300665
  ],
  pop: 65046,
  state: 'MA'
}
```

```
{
  _id: '01833',
  city: 'GEORGETOWN',
  loc: [
    -70.982239,
    42.728067
  ],
  pop: 6384,
  state: 'MA'
}
```

```
> db.MovieDetails.find({"$or": [
  {"pop": {"$gt": 50000}},
  {"loc.0": {"$gt": -71}}
]},
{"_id": 0, "city": 1, "pop": 1, "loc": 1})
```

```
{
  city: 'PITTSFIELD',
  loc: [
    -73.247088,
    42.453086
  ],
  pop: 50655
}
```

```
{
  city: 'FRAMINGHAM',
  loc: [
    -71.425486,
    42.300665
  ],
  pop: 65046
}
```

```
{
  city: 'GEORGETOWN',
  loc: [
    -70.982239,
    42.728067
  ],
  pop: 6384
}
```



```
> db.MovieDetails.find({"loc":{"$all":[-70.847377,42.783475]}})
{
  _id: '01951',
  city: 'NEWBURY',
  loc: [
    -70.847377,
    42.783475
  ],
  pop: 3710,
  state: 'MA'
}
```

```
> db.MovieDetails.find({
  "pop": {"$lt": 5000, "$ne": null}
},
{"_id": 0, "city": 1, "pop": 1})
{
  city: 'BARRE',
  pop: 4546
}
{
  city: 'BLANDFORD',
  pop: 1240
}
{
  city: 'BRIMFIELD',
  pop: 3706
}
{
  city: 'CHESTER',
  pop: 1688
}
{
  city: 'CHESTERFIELD',
  pop: 177
}
{
```

```

> db.MovieDetails.count({"loc": {"$exists": true}})
< DeprecationWarning: Collection.count() is deprecated. Use countDocuments or estimatedDocumentCount.
< 29353
> db.MovieDetails.count({"loc": null})
< 0
> db.MovieDetails.find({"city": {"$type": "string"}}).pretty()
< {
  _id: '01001',
  city: 'AGAWAM',
  loc: [
    -72.622739,
    42.070206
  ],
  pop: 15338,
  state: 'MA'
}
{
  _id: '01002',
  city: 'CUSHMAN',
  loc: [
    -72.51565,
    42.377017
  ],
  pop: 36963,
  state: 'MA'
}
{
  _id: '01005',
  city: 'BARRE',

```

```

> db.MovieDetails.count({"city": {"$type": "null"}})
< 0
> db.movieDetails.find({"state": {"$all": ["MA", "CA"]}}, {"_id": 0, "city": 1, "state": 1})
<
> db.movieDetails.count({"state": {"$all": ["MA", "CA"]}}, {"_id": 0, "city": 1, "state": 1})
< 0
> db.movieDetails.count({"state": {"$all": ["MA", "CA"]}}, {"_id": 0, "city": 1, "state": 1})
< 0
> db.movieDetails.find({"state": {"$in": ["MA", "CA"]}}, {"_id": 0, "city": 1, "state": 1})
<
> db.MovieDetails.find({"state": {"$in": ["MA", "CA"]}}, {"_id": 0, "city": 1, "state": 1})
< {
  city: 'AGAWAM',
  state: 'MA'
}
{
  city: 'CUSHMAN',
  state: 'MA'
}
{
  city: 'BARRE',
  state: 'MA'
}
{

```

```
db.MovieDetails.find({ "$and": [{ "state": "MA" }, { "pop": { "$gt": 30000 } }]})
{
  _id: '01002',
  city: 'CUSHMAN',
  loc: [
    -72.51565,
    42.377017
  ],
  pop: 36963,
  state: 'MA'
}
{
  _id: '01020',
  city: 'CHICOPEE',
  loc: [
    -72.576142,
    42.176443
  ],
  pop: 31495,
  state: 'MA'
}
{
  _id: '01040',
  city: 'HOLYOKE',
  loc: [
    -72.626193,
    42.202007
  ],
  pop: 43704,
  state: 'MA'
}
```

```
db.MovieDetails.find({ "$or": [{ "state": "MA" }, { "pop": { "$gt": 40000 } }] })
{
  _id: '01001',
  city: 'AGAWAM',
  loc: [
    -72.622739,
    42.070206
  ],
  pop: 15338,
  state: 'MA'
}
{
  _id: '01002',
  city: 'CUSHMAN',
  loc: [
    -72.51565,
    42.377017
  ],
  pop: 36963,
  state: 'MA'
}
{
  _id: '01005',
  city: 'BARRE',
  loc: [
    -72.108354,
    42.409698
  ],
  pop: 10000,
  state: 'MA'
}
```

```
db.MovieDetails.find({ "loc": { "$all": [-72.622739, 42.070206] } })
{
  _id: '01001',
  city: 'AGAWAM',
  loc: [
    -72.622739,
    42.070206
  ],
  pop: 15338,
  state: 'MA'
}
db.MovieDetails
admin.MovieDetails
db.MovieDetails.find({ "loc": { "$size": 2 } })
{
  _id: '01001',
  city: 'AGAWAM',
  loc: [
    -72.622739,
    42.070206
  ],
  pop: 15338,
  state: 'MA'
}
{
  _id: '01002',
  city: 'CUSHMAN',
```