

Mini project exercise for Mongo DB lab

BASIC SECTION : How to Use AND Operator in MongoDB

Dataset:

Dataset - StudentsDetails2

```
{  
  "_id" : 1,  
  "std_name" : "Mukesh",  
  "Gender" : "Male",  
  "class" : "VI",  
  "age" : 11,  
  "grd_point" : 33  
}
```

```
{  
  "_id" : 2,  
  "std_name" : "Dechamma",  
  "Gender" : "Female",  
  "class" : "VI",  
  "age" : 13,  
  "grd_point" : 30  
}
```

```
{  
  "_id" : 3,  
  "std_name" : "Akash",
```

```
"Gender" : "Male",  
"class" : "V",  
"age" : 14,  
"grd_point" : 35.1257  
}
```

```
{  
  "_id" : 4,  
  "std_name" : "Geetha",  
  "Gender" : "Female",  
  "class" : "X",  
  "age" : 17,  
  "grd_point" : 36.2514  
}
```

```
{  
  "_id" : 5,  
  "std_name" : "Bhomika",  
  "Gender" : "Female",  
  "class" : "X",  
  "age" : 19,  
  "grd_point" : 35.5201  
}
```

```
{  
  "_id" : 6,  
  "std_name" : "Nitin",  
  "Gender" : "Male",
```

```
"class" : "V",  
"age" : 16,  
"grd_point" : 35.5201  
}
```

21) Demonstrate Use Of And Operator Displays Record Whose Gender Is Female And Are Studing In X STD --2 Conditions --Use Add Condition.

```
db.studentdetails.find({$and: [{ Gender: "Female" }, { class: "X" }]}))
```

```
> db.studentdetails.find({$and: [{ Gender: "Female" }, { class: "X" }]}))  
< {  
  _id: 4,  
  std_name: 'Geetha',  
  Gender: 'Female',  
  class: 'X',  
  age: 17,  
  grd_point: 36.2514  
}  
{  
  _id: 5,  
  std_name: 'Bhomika',  
  Gender: 'Female',  
  class: 'X',  
  age: 19,  
  grd_point: 35.5201  
}
```

22) Displays Count Regarding How Many Female Students Are There In X Std, Use Add Condition

```
db.studentdetails.countDocuments({$and:[{Gender:"Female" },{class: "X" }]}))
```

```
> db.studentdetails.countDocuments({$and:[{Gender:"Female" },{class: "X" }]}))  
< 2
```

23) Demonstrate AND Operator Displays Record Whose Gender Is Male And Are In X STD

```
db.studentdetails.find({$and:[{Gender:"Male" },{class: "X"}]}))
```

```
> db.studentdetails.find({$and:[{Gender:"Male" },{class: "X"}]}))  
<
```

24) Displays Count Regarding How Many Male Students Are There In V Std, Use Add Condition

```
db.studentdetails.countDocuments({
```

```
  $and: [  
    { Gender: "Male" },  
    { class: "V" }
```

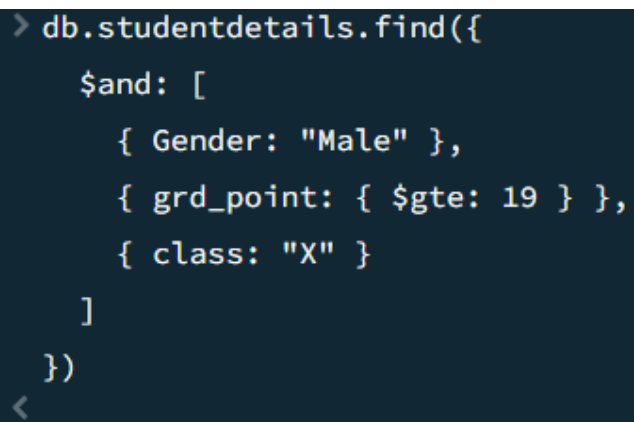
```
  ]
```

```
})
```

```
> db.studentdetails.countDocuments({  
  $and: [  
    { Gender: "Male" },  
    { class: "V" }  
  ]  
})  
< 2
```

25) Query To Find Whose Gender Male",grd_point>=19 And Class=X

```
db.studentdetails.find({  
  $and: [  
    { Gender: "Male" },  
    { grd_point: { $gte: 19 } },  
    { class: "X" }  
  ]  
})
```



```
> db.studentdetails.find({  
  $and: [  
    { Gender: "Male" },  
    { grd_point: { $gte: 19 } },  
    { class: "X" }  
  ]  
})  
<
```

26) Displays Students Details Whose Gender Is Female and grade point Greater Than Or Equal To 36 Use Add Condition.

```
db.studentdetails.find({  
  $and: [  
    { Gender: "Female" },  
    { grd_point: { $gte: 36 } }  
  ]  
})
```

```
> db.studentdetails.find({
  $and: [
    { Gender: "Female" },
    { grd_point: { $gte: 36 } }
  ]
})
< {
  _id: 4,
  std_name: 'Geetha',
  Gender: 'Female',
  class: 'X',
  age: 17,
  grd_point: 36.2514
}
```

27) Displays Students Details Whose grd_point between 30 and 35, Use Add Condition

```
db.studentdetails.find({
  $and: [
    { grd_point: { $gte: 30 } },
    { grd_point: { $lte: 35 } }
  ]
})
```

```

> db.studentdetails.find({
  $and: [
    { grd_point: { $gte: 30 } },
    { grd_point: { $lte: 35 } }
  ]
})
< {
  _id: 1,
  std_name: 'Mukesh',
  Gender: 'Male',
  class: 'VI',
  age: 11,
  grd_point: 33
}
{
  _id: 2,
  std_name: 'Dechamma',
  Gender: 'Female',
  class: 'VI',
  age: 13,
  grd_point: 30
}

```

28) Displays Students Details Whose Age Between 20 And 128

```

db.studentdetails.find({
  $and: [
    { age: { $gte: 20 } },
    { age: { $lte: 128 } }
  ]
})

```

```
> db.studentdetails.find({
  $and: [
    { age: { $gte: 20 } },
    { age: { $lte: 128 } }
  ]
})
<
```


INTERMEDIATE SECTION :

39) Query Find Marks Greater Than Or Equal To 80 Using \$Elemmatch

```
db.details.find({marks:{$elemMatch: { $gte:80 }}});
```

```
>_MONGOSH
< {
  _id: 1,
  details: [
    {
      name: 'bhumika',
      age: 23
    }
  ],
  marks: [
    80,
    89,
    90
  ]
}
{
  _id: 2,
  details: [
    {
      name: 'geetha',
      age: 21
    }
  ]
}
```

```
>_MONGOSH
],
marks: [
  90,
  85,
  70
]
}
{
  _id: 3,
  details: [
    {
      name: 'mahadevaswamy',
      age: 25
    }
  ],
  marks: [
    86,
    79,
    70
  ]
}
```

```
}
{
  _id: 4,
  details: [
    {
      name: 'manjunath',
      age: 22
    }
  ],
  marks: [
    88,
    81,
    78
  ]
}
```

40) Query To Find Marks Between 80 And 85 Using \$Elemmatch

db.details.find({marks:{\$elemMatch: { \$gte:80,\$lte:85 }}});

```
< {
  _id: 1,
  details: [
    {
      name: 'bhumika',
      age: 23
    }
  ],
  marks: [
    88,
    89,
    90
  ]
}
{
  _id: 2,
  details: [
    {
      name: 'geetha',
      age: 21
    }
  ],
  marks: [
    80,
    81,
    82
  ]
}
```

```
],  
  marks: [  
    90,  
    85,  
    70  
  ]  
}  
[  
  {  
    _id: 4,  
    details: [  
      {  
        name: 'manjunath',  
        age: 22  
      }  
    ],  
    marks: [  
      88,  
      81,  
      78  
    ]  
  }  
]
```