

# MongoDB - Consultes

```
→ ~ mongo
MongoDB shell version v4.0.9
connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("7bbdf783-8ade-43c4-8fc2-ef46ae44fcd") }
MongoDB server version: 4.0.9
```

1. Consulta que mostre els usuaris en interès per l'"ART".

```
db.users.find({"interest":"ART"}).pretty()
```

```
{
  "_id" : ObjectId("528f35450fe5e6467e58ae79"),
  "user_id" : "user3",
  "password" : "b1c1d1",
  "sex" : "Female",
  "age" : 19,
  "date_of_join" : "16/10/2010",
  "education" : "M.C.A.",
  "profession" : "IT COR.",
  "interest" : "ART",
  "extra" : {
    "community_name" : [
      "MODERN ART",
      "CLASSICAL ART",
      "WESTERN ART"
    ],
    "community_moder_id" : [
      "MR. Rifel",
      "MR. Sarma",
      "MR. Bhatia"
    ],
    "community_members" : [
      5000,
      2000,
      1500
    ],
    "friends" : {
      "valued_friends_id" : [
        "philip",
        "anant",
        "alan"
      ],
      "ban_friends_id" : [
        "Amir",
        "Raja",
        "mont"
      ]
    }
  }
}
```

2. Consulta que mostre els usuaris sense interès per l'”**ART**”.

```
db.users.find({"interest":{"$ne: "ART"}}).pretty()
```

```
{
  "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
  "user_id" : "user2",
  "password" : "11aa1a",
  "sex" : "Male",
  "age" : 24,
  "date_of_join" : "17/10/2009",
  "education" : "M.B.A.",
  "profession" : "MARKETING",
  "interest" : "MUSIC",
  "extra" : {
    "community_name" : [
      "MODERN MUSIC",
      "CLASSICAL MUSIC",
      "WESTERN MUSIC"
    ],
    "community_moder_id" : [
      "MR. Roy",
      "MR. Das",
      "MR. Doglus"
    ],
    "community_members" : [
      500,
      300,
      1400
    ],
    "friends" : {
      "valued_friends_id" : [
        "pal",
        "viki",
        "john"
      ],
      "ban_friends_id" : [
        "monoj",
        "jalan",
        "evan"
      ]
    }
  }
}

{
  "_id" : ObjectId("528f34950fe5e6467e58ae77"),
  "user_id" : "user1",
  "password" : "1a2b3c",
  "sex" : "Male",
  "age" : 17,
  "date_of_join" : "16/10/2010",
  "education" : "M.C.A.",
  "profession" : "CONSULTANT",
  "interest" : "MUSIC",
  "extra" : {
    "community_name" : [
      "MODERN MUSIC",
      "CLASSICAL MUSIC",
      "WESTERN MUSIC"
    ]
  }
}
```

```

        ],
        "community_moder_id" : [
            "MR. Alex",
            "MR. Dang",
            "MR. Haris"
        ],
        "community_members" : [
            700,
            200,
            1500
        ],
        "friends" : {
            "valued_friends_id" : [
                "kumar",
                "harry",
                "anand"
            ],
            "ban_friends_id" : [
                "Amir",
                "Raja",
                "mont"
            ]
        }
    }
}
{
    "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
    "user_id" : "user4",
    "password" : "abczyx",
    "sex" : "Female",
    "age" : 22,
    "date_of_join" : "17/8/2009",
    "education" : "M.B.B.S.",
    "profession" : "DOCTOR",
    "interest" : "SPORTS",
    "extra" : {
        "community_name" : [
            "ATHELATIC",
            "GAMES FAN GYES",
            "FAVOURIT GAMES"
        ],
        "community_moder_id" : [
            "MR. Paul",
            "MR. Das",
            "MR. Doglus"
        ],
        "community_members" : [
            2500,
            2200,
            3500
        ],
        "friends" : {
            "valued_friends_id" : [
                "vinod",
                "viki",
                "john"
            ],
            "ban_friends_id" : [
                "jalan",
                "monoj",
                "evan"
            ]
        }
    }
}

```

3. Consulta que mostre els usuaris en edat superior a 22 anys.

```
db.users.find({"age":{$gte: 22}}).pretty()
```

```
{
  "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
  "user_id" : "user2",
  "password" : "11aa1a",
  "sex" : "Male",
  "age" : 24,
  "date_of_join" : "17/10/2009",
  "education" : "M.B.A.",
  "profession" : "MARKETING",
  "interest" : "MUSIC",
  "extra" : {
    "community_name" : [
      "MODERN MUSIC",
      "CLASSICAL MUSIC",
      "WESTERN MUSIC"
    ],
    "community_moder_id" : [
      "MR. Roy",
      "MR. Das",
      "MR. Doglus"
    ],
    "community_members" : [
      500,
      300,
      1400
    ],
    "friends" : {
      "valued_friends_id" : [
        "pal",
        "viki",
        "john"
      ],
      "ban_friends_id" : [
        "monoj",
        "jalan",
        "evan"
      ]
    }
  }
}
{
  "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
  "user_id" : "user4",
  "password" : "abczyx",
  "sex" : "Female",
  "age" : 22,
  "date_of_join" : "17/8/2009",
  "education" : "M.B.B.S.",
  "profession" : "DOCTOR",
  "interest" : "SPORTS",
  "extra" : {
    "community_name" : [
      "ATHELATIC",
      "GAMES FAN GYES",
      "FAVOURIT GAMES"
    ]
  }
}
```

```

    ],
    "community_moder_id" : [
      "MR. Paul",
      "MR. Das",
      "MR. Doglus"
    ],
    "community_members" : [
      2500,
      2200,
      3500
    ],
    "friends" : {
      "valued_friends_id" : [
        "vinod",
        "viki",
        "john"
      ],
      "ban_friends_id" : [
        "jalan",
        "monoj",
        "evan"
      ]
    }
  }
}

```

4. Consulta que mostre els usuaris en edat entre 17 i 19 anys, ambdues incloses.

```
db.users.find({$and:[{"age":{$gte:17}},{"age":{$lte:19}}]}).pretty()
```

```

{
  "_id" : ObjectId("528f35450fe5e6467e58ae79"),
  "user_id" : "user3",
  "password" : "b1c1d1",
  "sex" : "Female",
  "age" : 19,
  "date_of_join" : "16/10/2010",
  "education" : "M.C.A.",
  "profession" : "IT COR.",
  "interest" : "ART",
  "extra" : {
    "community_name" : [
      "MODERN ART",
      "CLASSICAL ART",
      "WESTERN ART"
    ],
    "community_moder_id" : [
      "MR. Rifel",
      "MR. Sarma",
      "MR. Bhatia"
    ],
    "community_members" : [
      5000,
      2000,

```

```

        1500
    ],
    "friends" : {
        "valued_friends_id" : [
            "philip",
            "anant",
            "alan"
        ],
        "ban_friends_id" : [
            "Amir",
            "Raja",
            "mont"
        ]
    }
}
{
    "_id" : ObjectId("528f34950fe5e6467e58ae77"),
    "user_id" : "user1",
    "password" : "1a2b3c",
    "sex" : "Male",
    "age" : 17,
    "date_of_join" : "16/10/2010",
    "education" : "M.C.A.",
    "profession" : "CONSULTANT",
    "interest" : "MUSIC",
    "extra" : {
        "community_name" : [
            "MODERN MUSIC",
            "CLASSICAL MUSIC",
            "WESTERN MUSIC"
        ],
        "community_moder_id" : [
            "MR. Alex",
            "MR. Dang",
            "MR. Haris"
        ],
        "community_members" : [
            700,
            200,
            1500
        ],
        "friends" : {
            "valued_friends_id" : [
                "kumar",
                "harry",
                "anand"
            ],
            "ban_friends_id" : [
                "Amir",
                "Raja",
                "mont"
            ]
        }
    }
}

```

5. Consulta que mostre els usuaris que tenen a **"monoj"** dins la seua llista d'amics bloquejats (*ban\_friends\_id*).

```
db.users.find({"extra.friends.ban_friends_id":"monoj"}).pretty()
```

```
{
  "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
  "user_id" : "user2",
  "password" : "11aa1a",
  "sex" : "Male",
  "age" : 24,
  "date_of_join" : "17/10/2009",
  "education" : "M.B.A.",
  "profession" : "MARKETING",
  "interest" : "MUSIC",
  "extra" : {
    "community_name" : [
      "MODERN MUSIC",
      "CLASSICAL MUSIC",
      "WESTERN MUSIC"
    ],
    "community_moder_id" : [
      "MR. Roy",
      "MR. Das",
      "MR. Doglus"
    ],
    "community_members" : [
      500,
      300,
      1400
    ],
    "friends" : {
      "valued_friends_id" : [
        "pal",
        "viki",
        "john"
      ],
      "ban_friends_id" : [
        "monoj",
        "jalan",
        "evan"
      ]
    }
  }
}
{
  "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
  "user_id" : "user4",
  "password" : "abczyx",
  "sex" : "Female",
  "age" : 22,
  "date_of_join" : "17/8/2009",
  "education" : "M.B.B.S.",
  "profession" : "DOCTOR",
  "interest" : "SPORTS",
  "extra" : {
    "community_name" : [
      "ATHELATIC",
      "GAMES FAN GYES",
```

```

        "FAVOURIT GAMES"
      ],
      "community_moder_id" : [
        "MR. Paul",
        "MR. Das",
        "MR. Doglus"
      ],
      "community_members" : [
        2500,
        2200,
        3500
      ],
      "friends" : {
        "valued_friends_id" : [
          "vinod",
          "viki",
          "john"
        ],
        "ban_friends_id" : [
          "jalan",
          "monoj",
          "evan"
        ]
      }
    }
  }
}

```

6. Consulta que mostre els usuaris que tenen un nivell educatiu d'"M.C.A." i de professió "IT COR.".

```
db.users.find({$and:[{"education":"M.C.A."}, {"profession":"IT COR."}]})
```

```

{
  "_id" : ObjectId("528f35450fe5e6467e58ae79"),
  "user_id" : "user3",
  "password" : "b1c1d1",
  "sex" : "Female",
  "age" : 19,
  "date_of_join" : "16/10/2010",
  "education" : "M.C.A.",
  "profession" : "IT COR.",
  "interest" : "ART",
  "extra" : {
    "community_name" : [
      "MODERN ART",
      "CLASSICAL ART",
      "WESTERN ART"
    ],
    "community_moder_id" : [
      "MR. Rifel",
      "MR. Sarma",
      "MR. Bhatia"
    ],
    "community_members" : [
      5000,
      2000,
      1500
    ],
    "friends" : {

```



```

        "valued_friends_id" : [
            "philip",
            "anant",
            "alan"
        ],
        "ban_friends_id" : [
            "Amir",
            "Raja",
            "mont"
        ]
    }
}

```

7. Consulta que mostre els usuaris que tenen un nivell educatiu d'"M.B.A." o de professió "IT COR."

```
db.users.find({$or:[{"education":"M.B.A."},{ "profession":"IT COR."}]})
```

```

{
  "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
  "user_id" : "user2",
  "password" : "11aa1a",
  "sex" : "Male",
  "age" : 24,
  "date_of_join" : "17/10/2009",
  "education" : "M.B.A.",
  "profession" : "MARKETING",
  "interest" : "MUSIC",
  "extra" : {
    "community_name" : [
      "MODERN MUSIC",
      "CLASSICAL MUSIC",
      "WESTERN MUSIC"
    ],
    "community_moder_id" : [
      "MR. Roy",
      "MR. Das",
      "MR. Doglus"
    ],
    "community_members" : [
      500,
      300,
      1400
    ],
    "friends" : {
      "valued_friends_id" : [
        "pal",
        "viki",
        "john"
      ],
      "ban_friends_id" : [
        "monoj",
        "jalan",
        "evan"
      ]
    }
  }
}

```

```

{
  "_id" : ObjectId("528f35450fe5e6467e58ae79"),
  "user_id" : "user3",
  "password" : "b1c1d1",
  "sex" : "Female",
  "age" : 19,
  "date_of_join" : "16/10/2010",
  "education" : "M.C.A.",
  "profession" : "IT COR.",
  "interest" : "ART",
  "extra" : {
    "community_name" : [
      "MODERN ART",
      "CLASSICAL ART",
      "WESTERN ART"
    ],
    "community_moder_id" : [
      "MR. Rifel",
      "MR. Sarma",
      "MR. Bhatia"
    ],
    "community_members" : [
      5000,
      2000,
      1500
    ],
    "friends" : {
      "valued_friends_id" : [
        "philip",
        "anant",
        "alan"
      ],
      "ban_friends_id" : [
        "Amir",
        "Raja",
        "mont"
      ]
    }
  }
}

```

8. Consulta que mostre els usuaris que tenen a **"monoj"**, **"jalan"** i **"evan"** com a llista d'amics bloquejats (*ban\_friends\_id*), i a més en este ordre concret.

```
db.users.find({"extra.friends.ban_friends_id":["monoj","jalan","evan"]})
```

```

{
  "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
  "user_id" : "user2",
  "password" : "11aa1a",
  "sex" : "Male",
  "age" : 24,
  "date_of_join" : "17/10/2009",
  "education" : "M.B.A.",
  "profession" : "MARKETING",
  "interest" : "MUSIC",
  "extra" : {

```

```

        "community_name" : [
            "MODERN MUSIC",
            "CLASSICAL MUSIC",
            "WESTERN MUSIC"
        ],
        "community_moder_id" : [
            "MR. Roy",
            "MR. Das",
            "MR. Doglus"
        ],
        "community_members" : [
            500,
            300,
            1400
        ],
        "friends" : {
            "valued_friends_id" : [
                "pal",
                "viki",
                "john"
            ],
            "ban_friends_id" : [
                "monoj",
                "jalan",
                "evan"
            ]
        }
    }
}

```

9. Consulta que mostre els usuaris que tenen a **"monoj"**, **"jalan"** i **"evan"** com a llista d'amics bloquejats (*ban\_friends\_id*), però en qualsevol ordre.

```
db.users.find({"extra.friends.ban_friends_id":{"$all:["monoj","jalan","evan"]}})
```

```

{
  "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
  "user_id" : "user2",
  "password" : "11aa1a",
  "sex" : "Male",
  "age" : 24,
  "date_of_join" : "17/10/2009",
  "education" : "M.B.A.",
  "profession" : "MARKETING",
  "interest" : "MUSIC",
  "extra" : {
    "community_name" : [
      "MODERN MUSIC",
      "CLASSICAL MUSIC",
      "WESTERN MUSIC"
    ],
    "community_moder_id" : [
      "MR. Roy",
      "MR. Das",
      "MR. Doglus"
    ]
  }
}

```

```

    ],
    "community_members" : [
        500,
        300,
        1400
    ],
    "friends" : {
        "valued_friends_id" : [
            "pal",
            "viki",
            "john"
        ],
        "ban_friends_id" : [
            "monoj",
            "jalan",
            "evan"
        ]
    }
}

{
    "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
    "user_id" : "user4",
    "password" : "abczyx",
    "sex" : "Female",
    "age" : 22,
    "date_of_join" : "17/8/2009",
    "education" : "M.B.B.S.",
    "profession" : "DOCTOR",
    "interest" : "SPORTS",
    "extra" : {
        "community_name" : [
            "ATHELATIC",
            "GAMES FAN GYES",
            "FAVOURIT GAMES"
        ],
        "community_moder_id" : [
            "MR. Paul",
            "MR. Das",
            "MR. Doglus"
        ],
        "community_members" : [
            2500,
            2200,
            3500
        ],
        "friends" : {
            "valued_friends_id" : [
                "vinod",
                "viki",
                "john"
            ],
            "ban_friends_id" : [
                "jalan",
                "monoj",
                "evan"
            ]
        ]
    }
}

```

```

    }
  }
}

```

10. Consulta que mostre els usuaris que pertanyen a alguna comunitat que té entre 2200 i 2500 membres (*community\_members*), ambdós inclosos.

```
db.users.find({"extra.community_members":{"$elemMatch":{"$gte:2200,$lte:2500}}})
```

```

{
  "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
  "user_id" : "user4",
  "password" : "abczyx",
  "sex" : "Female",
  "age" : 22,
  "date_of_join" : "17/8/2009",
  "education" : "M.B.B.S.",
  "profession" : "DOCTOR",
  "interest" : "SPORTS",
  "extra" : {
    "community_name" : [
      "ATHELATIC",
      "GAMES FAN GYES",
      "FAVOURIT GAMES"
    ],
    "community_moder_id" : [
      "MR. Paul",
      "MR. Das",
      "MR. Doglus"
    ],
    "community_members" : [
      2500,
      2200,
      3500
    ],
    "friends" : {
      "valued_friends_id" : [
        "vinod",
        "viki",
        "john"
      ],
      "ban_friends_id" : [
        "jalan",
        "monoj",
        "evan"
      ]
    }
  }
}

```

11. Consulta que mostre els usuaris que pertanyen a comunitats que tenen menys o igual de 700 o més o igual de 1500 membres (*community\_members*), havent de complir-se les 2 condicions, per separat, com a mínim a una comunitat.

```
db.users.find({$and:[{"extra.community_members":{$lte:700}},{"extra.community_members":{$gte:1500}}])
```

```
{
  "_id" : ObjectId("528f34950fe5e6467e58ae77"),
  "user_id" : "user1",
  "password" : "1a2b3c",
  "sex" : "Male",
  "age" : 17,
  "date_of_join" : "16/10/2010",
  "education" : "M.C.A.",
  "profession" : "CONSULTANT",
  "interest" : "MUSIC",
  "extra" : {
    "community_name" : [
      "MODERN MUSIC",
      "CLASSICAL MUSIC",
      "WESTERN MUSIC"
    ],
    "community_moder_id" : [
      "MR. Alex",
      "MR. Dang",
      "MR. Haris"
    ],
    "community_members" : [
      700,
      200,
      1500
    ],
    "friends" : {
      "valued_friends_id" : [
        "kumar",
        "harry",
        "anand"
      ],
      "ban_friends_id" : [
        "Amir",
        "Raja",
        "mont"
      ]
    }
  }
}
```

12. Consulta que mostre els usuaris que tenen a **"MR. Das"** com a moderador de la seua 2a comunitat (*community\_moder\_id*).

13. Mostra 5 exemples variats de consultes ordenades creixent i decreixentment per diferents camps.

\*Ordenado descendientemente por edad de mayor a menor

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"interest":1,"_id":0}).sort({"age":-1})
```

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"interest":1,"_id":0}).sort({"age":-1})
{ "user_id" : "user2", "sex" : "Male", "age" : 24, "interest" : "MUSIC" }
{ "user_id" : "user4", "sex" : "Female", "age" : 22, "interest" : "SPORTS" }
{ "user_id" : "user3", "sex" : "Female", "age" : 19, "interest" : "ART" }
{ "user_id" : "user1", "sex" : "Male", "age" : 17, "interest" : "MUSIC" }
```

\*Ordenado descendientemente por el id del usuario

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"interest":1,"_id":0}).sort({"user_id":-1})
```

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"interest":1,"_id":0}).sort({"user_id":-1})
{ "user_id" : "user4", "sex" : "Female", "age" : 22, "interest" : "SPORTS" }
{ "user_id" : "user3", "sex" : "Female", "age" : 19, "interest" : "ART" }
{ "user_id" : "user2", "sex" : "Male", "age" : 24, "interest" : "MUSIC" }
{ "user_id" : "user1", "sex" : "Male", "age" : 17, "interest" : "MUSIC" }
```

\*Ordenado descendientemente por la fecha de ingreso

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"date_of_join":1,"_id":0}).sort({"date_of_join":-1})
```

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"date_of_join":1,"_id":0}).sort({"date_of_join":-1})
{ "user_id" : "user4", "sex" : "Female", "age" : 22, "date_of_join" : "17/8/2009" }
{ "user_id" : "user2", "sex" : "Male", "age" : 24, "date_of_join" : "17/10/2009" }
{ "user_id" : "user3", "sex" : "Female", "age" : 19, "date_of_join" : "16/10/2010" }
{ "user_id" : "user1", "sex" : "Male", "age" : 17, "date_of_join" : "16/10/2010" }
```

\*Orden ascendientemente por contraseña

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"password":1,"_id":0}).sort({"password":1})
```

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"password":1,"_id":0}).sort({"password":1})
{ "user_id" : "user2", "password" : "11aa1a", "sex" : "Male", "age" : 24 }
{ "user_id" : "user1", "password" : "1a2b3c", "sex" : "Male", "age" : 17 }
{ "user_id" : "user4", "password" : "abczyx", "sex" : "Female", "age" : 22 }
{ "user_id" : "user3", "password" : "b1c1d1", "sex" : "Female", "age" : 19 }
```

\*Ordenado ascendente por la cantidad de miembros de comunidad

```
db.users.find({},{"user_id":1,"sex":1,"age":1,"extra.community_members":1,"_id":0}).sort({"extra.community_members":1}).pretty()
```

```
{
  "user_id" : "user1",
  "sex" : "Male",
  "age" : 17,
  "extra" : {
    "community_members" : [
      700,
      200,
      1500
    ]
  }
}
{
  "user_id" : "user2",
  "sex" : "Male",
  "age" : 24,
  "extra" : {
    "community_members" : [
      500,
      300,
      1400
    ]
  }
}
{
  "user_id" : "user3",
  "sex" : "Female",
  "age" : 19,
  "extra" : {
    "community_members" : [
      5000,
      2000,
      1500
    ]
  }
}
{
  "user_id" : "user4",
  "sex" : "Female",
  "age" : 22,
  "extra" : {
    "community_members" : [
      2500,
      2200,
      3500
    ]
  }
}
```



