

### **Queries for the Employee Collection:**

- 1) `db.EMPLOYEES_DATA.find({"Department_Name": "Research"}).pretty()`
- 2) `db.EMPLOYEES_DATA.aggregate({$project: { "Emp_Fname" : 1,"Emp_Lname" : 1, "Department_Name": 1 }}).pretty()`
- 3) `db.EMPLOYEES_DATA.find({ $and: [ { "Department_Name": "Research"}, {"Emp_Fname": "Ramesh" } ] } ).pretty()`
- 4) `db.EMPLOYEES_DATA.find({"Projects.ProjectName": "DatabaseSystems"}, {"Emp_Fname":1 , "Emp_Lname":1} ).pretty()`

### **Output:**

- 1) This query prints only those data where "Department\_Name" is "Research".

**`db.EMPLOYEE_DATA.find({"Department_Name": "Research"}).pretty()`**

#### ***Output:***

```
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02b"),
  "Emp_Fname" : "Franklin",
  "Department_Name" : "Research",
  "Projects" : [
    {
      "Hours" : "10.0",
      "ProjectName" : "ProductZ",
      "ProjectNumber" : "3"
    },
    {
      "Hours" : "10.0",
      "ProjectName" : "Computerization",
      "ProjectNumber" : "10"
    },
    {
      "Hours" : "10.0",
      "ProjectName" : "ProductY",
      "ProjectNumber" : "2"
    },
    {
      "Hours" : "10.0",
      "ProjectName" : "Reorganization",
      "ProjectNumber" : "20"
    }
  ]
}
```

```

    }
  ],
  "Emp_Lname" : "Wong"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02c"),
  "Emp_Fname" : "Ramesh",
  "Department_Name" : "Research",
  "Projects" : [
    {
      "Hours" : "40.0",
      "ProjectName" : "ProductZ",
      "ProjectNumber" : "3"
    }
  ],
  "Emp_Lname" : "Narayan"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c031"),
  "Emp_Fname" : "John",
  "Department_Name" : "Research",
  "Projects" : [
    {
      "Hours" : "7.5",
      "ProjectName" : "ProductY",
      "ProjectNumber" : "2"
    },
    {
      "Hours" : "32.5",
      "ProjectName" : "ProductX",
      "ProjectNumber" : "1"
    }
  ],
  "Emp_Lname" : "Smith"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c050"),
  "Emp_Fname" : "Joyce",
  "Department_Name" : "Research",
  "Projects" : [
    {
      "Hours" : "20.0",
      "ProjectName" : "ProductY",
      "ProjectNumber" : "2"
    },
    {

```

```

        "Hours" : "20.0",
        "ProjectName" : "ProductX",
        "ProjectNumber" : "1"
    }
],
"Emp_Lname" : "English"
}
{
    "_id" : ObjectId("5f2adf07c99f11844ab6c05c"),
    "Emp_Fname" : "Michael",
    "Department_Name" : "Research",
    "Projects" : [
        {
            "Hours" : "11.0",
            "ProjectName" : "EntityAnnot",
            "ProjectNumber" : "4"
        }
    ],
    "Emp_Lname" : "Morgan"
}
{
    "_id" : ObjectId("5f2adf07c99f11844ab6c06b"),
    "Emp_Fname" : "Andrea",
    "Department_Name" : "Research",
    "Projects" : [
        {
            "Hours" : "45.0",
            "ProjectName" : "ProductZ",
            "ProjectNumber" : "3"
        }
    ],
    "Emp_Lname" : "Sondrini"
}
{
    "_id" : ObjectId("5f2adf07c99f11844ab6c070"),
    "Emp_Fname" : "James",
    "Department_Name" : "Research",
    "Projects" : [
        {
            "Hours" : "15.0",
            "ProjectName" : "MotherBoard",
            "ProjectNumber" : "29"
        }
    ],
    "Emp_Lname" : "Miller"
}

```

- 2) This query only returns those fields that are set to 1(True).

```
db.EMPLOYEES_DATA.aggregate({$project:{ "Emp_Fname" : 1,"Emp_Lname" : 1, "Department_Name": 1 }}).pretty()
```

***Output:***

```
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02a"),
  "Emp_Fname" : "Jennifer",
  "Department_Name" : "Administration",
  "Emp_Lname" : "Wallace"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02b"),
  "Emp_Fname" : "Franklin",
  "Department_Name" : "Research",
  "Emp_Lname" : "Wong"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02c"),
  "Emp_Fname" : "Ramesh",
  "Department_Name" : "Research",
  "Emp_Lname" : "Narayan"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02d"),
  "Emp_Fname" : "Jon",
  "Department_Name" : "Software",
  "Emp_Lname" : "Jones"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02e"),
  "Emp_Fname" : "Justin",
  "Department_Name" : "Software",
  "Emp_Lname" : "Mark"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c02f"),
  "Emp_Fname" : "James",
  "Department_Name" : "Headquarters",
  "Emp_Lname" : "Borg"
}
```

```

    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c030"),
        "Emp_Fname" : "Brad",
        "Department_Name" : "Software",
        "Emp_Lname" : "Knight"
    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c031"),
        "Emp_Fname" : "John",
        "Department_Name" : "Research",
        "Emp_Lname" : "Smith"
    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c032"),
        "Emp_Fname" : "Andy",
        "Department_Name" : "Hardware",
        "Emp_Lname" : "Vile"
    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c033"),
        "Emp_Fname" : "Jenny",
        "Department_Name" : "Hardware",
        "Emp_Lname" : "Vos"
    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c034"),
        "Emp_Fname" : "Josh",
        "Department_Name" : "Hardware",
        "Emp_Lname" : "Zell"
    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c035"),
        "Emp_Fname" : "Evan",
        "Department_Name" : "Hardware",
        "Emp_Lname" : "Wallis"
    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c036"),
        "Emp_Fname" : "Tom",
        "Department_Name" : "Hardware",
        "Emp_Lname" : "Brand"
    }
    {
        "_id" : ObjectId("5f2adf07c99f11844ab6c037"),
        "Emp_Fname" : "Chris",

```

```

    "Department_Name" : "Hardware",
    "Emp_Lname" : "Carter"
  }
  {
    "_id" : ObjectId("5f2adf07c99f11844ab6c038"),
    "Emp_Fname" : "Kim",
    "Department_Name" : "Software",
    "Emp_Lname" : "Grace"
  }
  {
    "_id" : ObjectId("5f2adf07c99f11844ab6c039"),
    "Emp_Fname" : "Bonnie",
    "Department_Name" : "Hardware",
    "Emp_Lname" : "Bays"
  }
  {
    "_id" : ObjectId("5f2adf07c99f11844ab6c03a"),
    "Emp_Fname" : "Jeff",
    "Department_Name" : "Software",
    "Emp_Lname" : "Chase"
  }
  {
    "_id" : ObjectId("5f2adf07c99f11844ab6c03b"),
    "Emp_Fname" : "Alec",
    "Department_Name" : "Hardware",
    "Emp_Lname" : "Best"
  }
  {
    "_id" : ObjectId("5f2adf07c99f11844ab6c03c"),
    "Emp_Fname" : "Sam",
    "Department_Name" : "Hardware",
    "Emp_Lname" : "Snedden"
  }
  {
    "_id" : ObjectId("5f2adf07c99f11844ab6c03d"),
    "Emp_Fname" : "John",
    "Department_Name" : "Sales",
    "Emp_Lname" : "James"
  }
}

```

- 3) This query retrieves only those fields where "Department\_Name": "Research" AND Employees First name is Ramesh.

```
db.EMPLOYEES_DATA.find({ $and: [ { "Department_Name": "Research"},  
{"Emp_Fname": "Ramesh" } ] } ).pretty()
```

***Output:***

```
{  
  "_id" : ObjectId("5f2adf07c99f11844ab6c02c"),  
  "Emp_Fname" : "Ramesh",  
  "Department_Name" : "Research",  
  "Projects" : [  
    {  
      "Hours" : "40.0",  
      "ProjectName" : "ProductZ",  
      "ProjectNumber" : "3"  
    }  
  ],  
  "Emp_Lname" : "Narayan"  
}
```

- 4) This query retrieves FirstName and LastName of the Employees who works on Project Database Systems.

```
db.EMPLOYEES_DATA.find({"Projects.ProjectName":  
"DatabaseSystems"}, {"Emp_Fname":1 , "Emp_Lname":1} ).pretty()
```

***Output:***

```
{  
  "_id" : ObjectId("5f2adf07c99f11844ab6c032"),  
  "Emp_Fname" : "Andy",  
  "Emp_Lname" : "Vile"  
}  
{  
  "_id" : ObjectId("5f2adf07c99f11844ab6c033"),  
  "Emp_Fname" : "Jenny",  
  "Emp_Lname" : "Vos"  
}  
{  
  "_id" : ObjectId("5f2adf07c99f11844ab6c034"),  
  "Emp_Fname" : "Josh",  
  "Emp_Lname" : "Zell"  
}
```

```
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c035"),
  "Emp_Fname" : "Evan",
  "Emp_Lname" : "Wallis"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c036"),
  "Emp_Fname" : "Tom",
  "Emp_Lname" : "Brand"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c037"),
  "Emp_Fname" : "Chris",
  "Emp_Lname" : "Carter"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c04c"),
  "Emp_Fname" : "Roy",
  "Emp_Lname" : "Lewallen"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c04d"),
  "Emp_Fname" : "Arnold",
  "Emp_Lname" : "Head"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c04e"),
  "Emp_Fname" : "Red",
  "Emp_Lname" : "Bacher"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c05b"),
  "Emp_Fname" : "Kim",
  "Emp_Lname" : "Ted"
}
{
  "_id" : ObjectId("5f2adf07c99f11844ab6c06f"),
  "Emp_Fname" : "Erin",
  "Emp_Lname" : "Maxfield"
}
```