

1) Create a database called **person** & create collection called **details**.

```
Terminal File Edit View Search Terminal Tabs Help
ukistu05@ukipc05: ~
bash: /home/ukistu05/Downloads/mongodb-linux-x86_64-ubuntu1604-3.4.4/bin: No such file or directory
ukistu05@ukipc05:~$ sudo mongo
[sudo] password for ukistu05:
MongoDB shell version v3.4.4
connecting to: mongodb://127.0.0.1:27017
MongoDB server version: 3.4.4
Server has startup warnings:
2018-07-05T12:27:52.512+0530 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine
2018-07-05T12:27:52.512+0530 I STORAGE [initandlisten] ** See http://dochub.mongodb.org/core/prodnotes-filesystem
2018-07-05T12:27:53.694+0530 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2018-07-05T12:27:53.695+0530 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted.
2018-07-05T12:27:53.695+0530 I CONTROL [initandlisten] ** WARNING: You are running this process as the root user, which is not recommended.
2018-07-05T12:27:53.695+0530 I CONTROL [initandlisten]
2018-07-05T12:27:53.696+0530 I CONTROL [initandlisten]
2018-07-05T12:27:53.696+0530 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/enabled is 'always'.
2018-07-05T12:27:53.696+0530 I CONTROL [initandlisten] ** We suggest setting it to 'never'
2018-07-05T12:27:53.696+0530 I CONTROL [initandlisten]

> show dbs
admin 0.000GB
local 0.000GB
music 0.000GB
uk13 0.000GB

> use person
switched to db person

> db.createCollection("details")
{ "ok" : 1 }

>
```

2) Create the above 6 person's details documents.

```
Terminal File Edit View Search Terminal Tabs Help
ukistu05@ukipc05: ~
> db.details.insert({"name":"ragu","age":18,"salary":8000})
WriteResult({ "nInserted" : 1 })
> db.details.insert({"name":"dinesh","age":20,"salary":10000})
WriteResult({ "nInserted" : 1 })
> db.details.insert({"name":"Rajesh","age":40,"salary":35000})
WriteResult({ "nInserted" : 1 })
> db.details.insert({"name":"nila","age":50,"salary":15000})
WriteResult({ "nInserted" : 1 })
> db.details.insert({"name":"malar","age":61,"salary":20000})
WriteResult({ "nInserted" : 1 })
> db.details.insert({"name":"ramani","age":65,"salary":20000})
WriteResult({ "nInserted" : 1 })
> db.details.find().pretty()
{
  "_id" : ObjectId("5b3de30ae54debb89f88c39f"),
  "name" : "ragu",
  "age" : 18,
  "salary" : 8000
}
{
  "_id" : ObjectId("5b3de32be54debb89f88c3a0"),
  "name" : "dinesh",
  "age" : 20,
  "salary" : 10000
}
{
  "_id" : ObjectId("5b3de353e54debb89f88c3a1"),
  "name" : "Rajesh",
  "age" : 40,
  "salary" : 35000
}
{
  "_id" : ObjectId("5b3de36be54debb89f88c3a2"),
  "name" : "nila",
  "age" : 50,
  "salary" : 15000
}
{
  "_id" : ObjectId("5b3de383e54debb89f88c3a3"),
  "name" : "malar",
  "age" : 61,
  "salary" : 20000
}
{
  "_id" : ObjectId("5b3de3a8e54debb89f88c3a4"),
  "name" : "ramani",
  "age" : 65,
  "salary" : 20000
}
>
```

3) Find the persons following these conditions

1. Age > 50

```
db.details.find({"age":{$gt: 50}})
{"_id" : ObjectId("5b3de383e54debb89f88c3a3"), "name" : "malar", "age" : 61, "salary" : 20000 }
{"_id" : ObjectId("5b3de3a8e54debb89f88c3a4"), "name" : "ramani", "age" : 65, "salary" : 20000 }
```

2. Age < 50

```
db.details.find({"age":{$lt: 50}})
{"_id" : ObjectId("5b3de30ae54debb89f88c39f"), "name" : "ragu", "age" : 18, "salary" : 8000 }
{"_id" : ObjectId("5b3de32be54debb89f88c3a0"), "name" : "dinesh", "age" : 20, "salary" : 10000 }
{"_id" : ObjectId("5b3de353e54debb89f88c3a1"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
```

3. Salary=20000/=

```
db.details.find({"salary":20000}).pretty()
{
  "_id" : ObjectId("5b3de383e54debb89f88c3a3"),
  "name" : "malar",
  "age" : 61,
  "salary" : 20000
}
{
  "_id" : ObjectId("5b3de3a8e54debb89f88c3a4"),
  "name" : "ramani",
  "age" : 65,
  "salary" : 20000
}
```

4. Salary <= 20000/=

```
db.details.find({"salary":{$lte: 20000}})
{"_id" : ObjectId("5b3de30ae54debb89f88c39f"), "name" : "ragu", "age" : 18, "salary" : 8000 }
{"_id" : ObjectId("5b3de32be54debb89f88c3a0"), "name" : "dinesh", "age" : 20, "salary" : 10000 }
{"_id" : ObjectId("5b3de36be54debb89f88c3a2"), "name" : "nila", "age" : 50, "salary" : 15000 }
{"_id" : ObjectId("5b3de383e54debb89f88c3a3"), "name" : "malar", "age" : 61, "salary" : 20000 }
{"_id" : ObjectId("5b3de3a8e54debb89f88c3a4"), "name" : "ramani", "age" : 65, "salary" : 20000 }
```

5. Salary < 20000/=

```
db.details.find({"salary":{$lt: 20000}})
{"_id" : ObjectId("5b3de30ae54debb89f88c39f"), "name" : "ragu", "age" : 18, "salary" : 8000 }
{"_id" : ObjectId("5b3de32be54debb89f88c3a0"), "name" : "dinesh", "age" : 20, "salary" : 10000 }
{"_id" : ObjectId("5b3de36be54debb89f88c3a2"), "name" : "nila", "age" : 50, "salary" : 15000 }
```

6. Salary > 20000/=

```
db.details.find({"salary":{$gt: 20000}})
{"_id" : ObjectId("5b3de353e54debb89f88c3a1"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
```

7. Age < 50 & Salary > 20000/=

```
db.details.find({$and:[{"age":{$lt: 50}},{"salary":{$gt: 20000}]})
{"_id" : ObjectId("5b3de353e54debb89f88c3a1"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
```

8. Age < 50 or Salary > 20000/=

```
db.details.find({$or:[{"age":{"$lt: 50}},{"salary":{"$gt: 20000}}]})
{"_id": ObjectId("5b3de30ae54debb89f88c39f"), "name": "ragu", "age": 18, "salary": 8000 }
{"_id": ObjectId("5b3de32be54debb89f88c3a0"), "name": "dinesh", "age": 20, "salary": 10000 }
{"_id": ObjectId("5b3de353e54debb89f88c3a1"), "name": "Rajesh", "age": 40, "salary": 35000 }
```

9. Age < 20 or Salary >= 10000/=

```
db.details.find({$or:[{"age":{"$lt: 20}},{"salary":{"$gte: 10000}}]})
{"_id": ObjectId("5b3de30ae54debb89f88c39f"), "name": "ragu", "age": 18, "salary": 8000 }
{"_id": ObjectId("5b3de32be54debb89f88c3a0"), "name": "dinesh", "age": 20, "salary": 10000 }
{"_id": ObjectId("5b3de353e54debb89f88c3a1"), "name": "Rajesh", "age": 40, "salary": 35000 }
{"_id": ObjectId("5b3de36be54debb89f88c3a2"), "name": "nila", "age": 50, "salary": 15000 }
{"_id": ObjectId("5b3de383e54debb89f88c3a3"), "name": "malar", "age": 61, "salary": 20000 }
{"_id": ObjectId("5b3de3a8e54debb89f88c3a4"), "name": "ramani", "age": 65, "salary": 20000 }
```

10. Age <= 20 and Salary >= 10000/=

```
db.details.find({$and:[{"age":{"$lte: 20}},{"salary":{"$gte: 10000}}]})
{"_id": ObjectId("5b3de32be54debb89f88c3a0"), "name": "dinesh", "age": 20, "salary": 10000 }
```