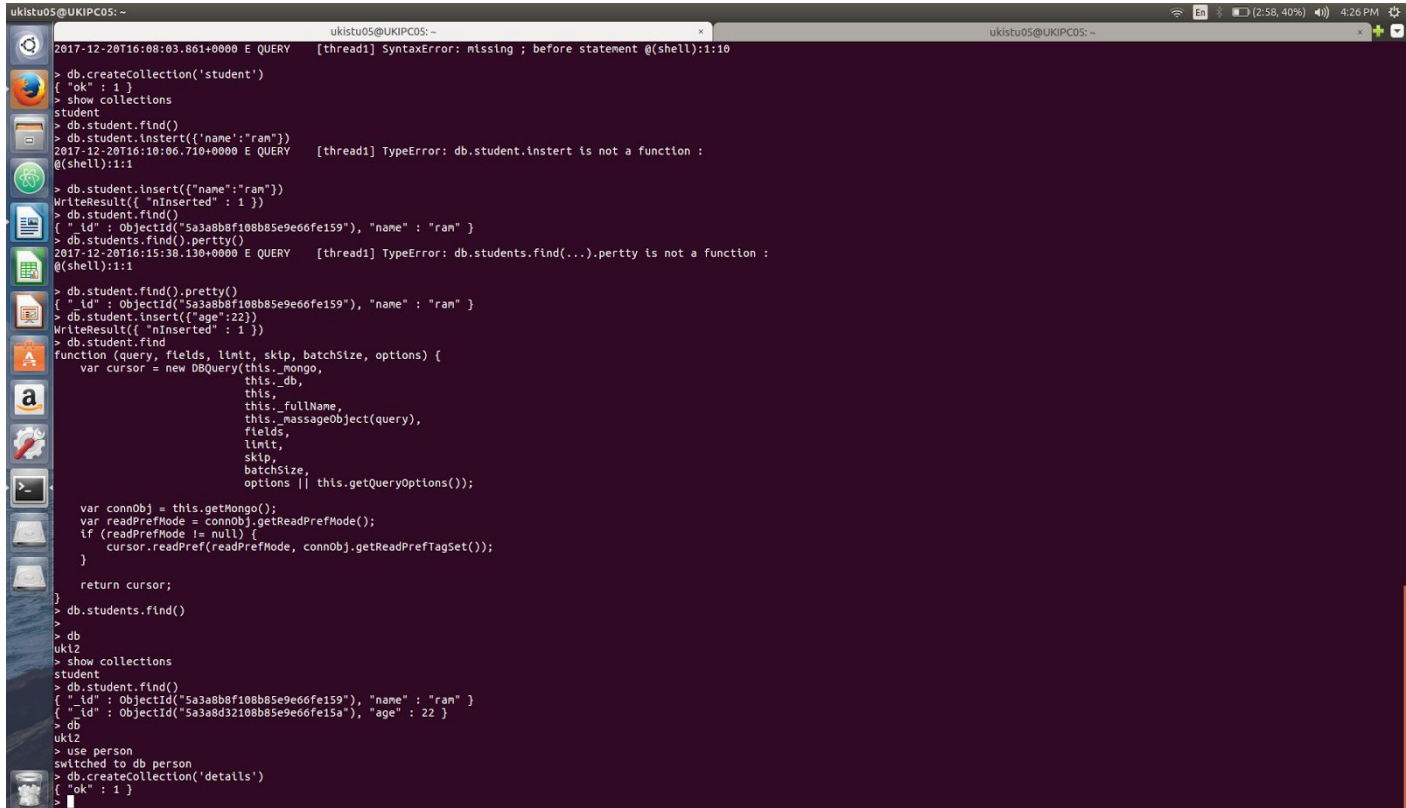


Mongodb exercise 1

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



```
ukistu05@UKIPC05: ~
2017-12-20T16:08:03.861+0000 E QUERY [thread1] SyntaxError: missing ; before statement @(<shell>):1:10
> db.createCollection('student')
{ "ok" : 1 }
> show collections
student
> db.student.find()
[{"_id" : ObjectId("5a3a8b8f108b85e9e66fe159"), "name" : "ram"}]
2017-12-20T16:10:06.710+0000 E QUERY [thread1] TypeError: db.student.instert is not a function :
@(<shell>):1:1
> db.student.insert({"name":"ram"})
WriteResult({ "ninserted" : 1 })
> db.student.find()
[{"_id" : ObjectId("5a3a8b8f108b85e9e66fe159"), "name" : "ram"}]
> db.students.find().pretty()
2017-12-20T16:15:38.130+0000 E QUERY [thread1] TypeError: db.students.find(...).pretty is not a function :
@(<shell>):1:1
> db.student.find().pretty()
{ "_id" : ObjectId("5a3a8b8f108b85e9e66fe159"), "name" : "ram" }
> db.student.insert({"age":22})
WriteResult({ "ninserted" : 1 })
> db.student.find()
function (query, fields, limit, skip, batchSize, options) {
  var cursor = new DBQuery(this._mongo,
    this._db,
    this,
    this._fullName,
    this._messageObject(query),
    fields,
    limit,
    skip,
    batchSize,
    options || this.getQueryOptions());
  var connObj = this.getMongo();
  var readPrefMode = connObj.getReadPrefMode();
  if (readPrefMode != null) {
    cursor.readPref(readPrefMode, connObj.getReadPrefTagSet());
  }
  return cursor;
}
> db.students.find()
[{"_id" : ObjectId("5a3a8b8f108b85e9e66fe159"), "name" : "ram"}, {"_id" : ObjectId("5a3a8d32108b85e9e66fe15a"), "age" : 22}]
> db
uk12
> show collections
student
> db.student.find()
[{"_id" : ObjectId("5a3a8b8f108b85e9e66fe159"), "name" : "ram"}, {"_id" : ObjectId("5a3a8d32108b85e9e66fe15a"), "age" : 22}]
> db
uk12
> use person
switched to db person
> db.createCollection('details')
{ "ok" : 1 }
>
```

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

Name	Age	Salary
Ragu	18	8000/=
Dinesh	20	10000/=
Rajesh	40	35000/=
Nila	50	15000/=
Malar	61	20000/=
Ramani	65	20000/=

```
ukistu05@UKIPC05: ~
2017-12-20T20:30:52.560+0000 I CONTROL [initandlisten]
> show collections
> db
test
> db
2017-12-20T20:39:55.999+0000 E QUERY [thread1] ReferenceError: dbs is not defined :
@ (shell):1:11
> show
2017-12-20T20:40:29.193+0000 E QUERY [thread1] Error: don't know how to show [] :
shellHelper.show@src/mongo/shell/utils.js:885:11
shellHelper@src/mongo/shell/utils.js:671:15
@ (shellhelp2):1:1
> show db
2017-12-20T20:40:42.449+0000 E QUERY [thread1] Error: don't know how to show [db] :
shellHelper.show@src/mongo/shell/utils.js:885:11
shellHelper@src/mongo/shell/utils.js:671:15
@ (shellhelp2):1:1
> db
test
> show dbs
local 0.000GB
person 0.000GB
uk12 0.000GB
> use person
switched to db person
> show collections
2017-12-20T20:41:32.777+0000 E QUERY [thread1] Error: don't know how to show [collections] :
shellHelper.show@src/mongo/shell/utils.js:885:11
shellHelper@src/mongo/shell/utils.js:671:15
@ (shellhelp2):1:1
> show collections
details
> db.details.insert({name:"Ragu", age:18, salary:8000})
WriteResult({"nInserted" : 1 })
> db.details.find()
{ "_id" : ObjectId("5a3acc833fda2b7a22024ba5"), "name" : "Ragu", "age" : 18, "salary" : 8000 }
> 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()
{ "_id" : ObjectId("5a3acc833fda2b7a22024ba5"), "name" : "Ragu", "age" : 18, "salary" : 8000 }
{ "_id" : ObjectId("5a3acd453fda2b7a22024ba6"), "name" : "Dinesh", "age" : 20, "salary" : 10000 }
{ "_id" : ObjectId("5a3acf023fda2b7a22024ba7"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
{ "_id" : ObjectId("5a3acf373fda2b7a22024ba8"), "name" : "Nila", "age" : 50, "salary" : 15000 }
{ "_id" : ObjectId("5a3acf653fda2b7a22024ba9"), "name" : "Malar", "age" : 61, "salary" : 20000 }
{ "_id" : ObjectId("5a3acf943fda2b7a22024baa"), "name" : "Ramani", "age" : 65, "salary" : 20000 }
>
[1]+ Stopped sudo mongo
ukistu05@UKIPC05:~$
```

3) Find the persons following this conditions

- 1) Age > 50
- 2) Age < 50

```
ukistu05@UKIPC05: ~
connecting to: test
Server has startup warnings:
2017-12-20T20:30:52.560+0000 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/enabled is 'always'.
2017-12-20T20:30:52.560+0000 I CONTROL [initandlisten] ** We suggest setting it to 'never'
2017-12-20T20:30:52.560+0000 I CONTROL [initandlisten]
> show dbs
local 0.000GB
person 0.000GB
ukiz 0.000GB
> use person
switched to db person
> show collections
details
> db.details.find()
{ "_id" : ObjectId("5a3acc833fda2b7a22024ba5"), "name" : "Ragu", "age" : 18, "salary" : 8000 }
{ "_id" : ObjectId("5a3acd453fda2b7a22024ba6"), "name" : "Dinesh", "age" : 20, "salary" : 10000 }
{ "_id" : ObjectId("5a3acf023fda2b7a22024ba7"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
{ "_id" : ObjectId("5a3acf373fda2b7a22024ba8"), "name" : "Nila", "age" : 50, "salary" : 15000 }
{ "_id" : ObjectId("5a3acf653fda2b7a22024ba9"), "name" : "Malar", "age" : 61, "salary" : 20000 }
{ "_id" : ObjectId("5a3acf943fda2b7a22024baa"), "name" : "Raman", "age" : 65, "salary" : 20000 }
> db.details.find().limit( age > 50 )
2017-12-20T21:05:30.734+0000 E QUERY [thread1] ReferenceError: age is not defined :
@ (shell):1:1
> db.details.find().limit("age" > 50)
{ "_id" : ObjectId("5a3acc833fda2b7a22024ba5"), "name" : "Ragu", "age" : 18, "salary" : 8000 }
{ "_id" : ObjectId("5a3acd453fda2b7a22024ba6"), "name" : "Dinesh", "age" : 20, "salary" : 10000 }
{ "_id" : ObjectId("5a3acf023fda2b7a22024ba7"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
{ "_id" : ObjectId("5a3acf373fda2b7a22024ba8"), "name" : "Nila", "age" : 50, "salary" : 15000 }
{ "_id" : ObjectId("5a3acf653fda2b7a22024ba9"), "name" : "Malar", "age" : 61, "salary" : 20000 }
{ "_id" : ObjectId("5a3acf943fda2b7a22024baa"), "name" : "Raman", "age" : 65, "salary" : 20000 }
> db.details.find("age" > 50)
{ "_id" : ObjectId("5a3acc833fda2b7a22024ba5"), "name" : "Ragu", "age" : 18, "salary" : 8000 }
{ "_id" : ObjectId("5a3acd453fda2b7a22024ba6"), "name" : "Dinesh", "age" : 20, "salary" : 10000 }
{ "_id" : ObjectId("5a3acf023fda2b7a22024ba7"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
{ "_id" : ObjectId("5a3acf373fda2b7a22024ba8"), "name" : "Nila", "age" : 50, "salary" : 15000 }
{ "_id" : ObjectId("5a3acf653fda2b7a22024ba9"), "name" : "Malar", "age" : 61, "salary" : 20000 }
{ "_id" : ObjectId("5a3acf943fda2b7a22024baa"), "name" : "Raman", "age" : 65, "salary" : 20000 }
> db.details.find("age" > 50)
2017-12-20T21:08:54.924+0000 E QUERY [thread1] SyntaxError: missing : after property id @ (shell):1:23
> db.details.find({age:$gt: 50})
2017-12-20T21:21:21.541+0000 E QUERY [thread1] SyntaxError: missing : after property id @ (shell):1:20
> db.details.find({age:$gt: 50})
{ "_id" : ObjectId("5a3acf653fda2b7a22024ba9"), "name" : "Malar", "age" : 61, "salary" : 20000 }
{ "_id" : ObjectId("5a3acf943fda2b7a22024baa"), "name" : "Raman", "age" : 65, "salary" : 20000 }
> clear
2017-12-20T21:22:27.014+0000 E QUERY [thread1] ReferenceError: clear is not defined :
@ (shell):1:1
> db.details.find({age:$gt: 50})
{ "_id" : ObjectId("5a3acf653fda2b7a22024ba9"), "name" : "Malar", "age" : 61, "salary" : 20000 }
{ "_id" : ObjectId("5a3acf943fda2b7a22024baa"), "name" : "Raman", "age" : 65, "salary" : 20000 }
> db.details.find({age:$lt: 50})
{ "_id" : ObjectId("5a3acc833fda2b7a22024ba5"), "name" : "Ragu", "age" : 18, "salary" : 8000 }
{ "_id" : ObjectId("5a3acd453fda2b7a22024ba6"), "name" : "Dinesh", "age" : 20, "salary" : 10000 }
{ "_id" : ObjectId("5a3acf023fda2b7a22024ba7"), "name" : "Rajesh", "age" : 40, "salary" : 35000 }
```

- 1) Salary=20000/=
- 2) Salary < = 20000/=
- 3) Salary < 20000/=
- 4) Salary > 20000/=

```
ukistu05@UKIPC05: ~
ukistu05@UKIPC05: ~
ukistu05@UKIPC05: ~
{ "id": "ObjectID("5a3acf373fda2b7a22024ba8")", "name": "Nila", "age": 50, "salary": 15000 }
{ "id": "ObjectID("5a3acf653fda2b7a22024ba9")", "name": "Malar", "age": 61, "salary": 20000 }
{ "id": "ObjectID("5a3acf943fda2b7a22024baa")", "name": "Ramani", "age": 65, "salary": 20000 }
> db.details.find().limit( age > 50)
2017-12-20T21:05:30.734+0000 E QUERY [thread1] ReferenceError: age is not defined :
@shell):1:1
>
> db.details.find().limit("age" > 50)
{ "id": "ObjectID("5a3acc833fda2b7a22024ba5")", "name": "Ragu", "age": 18, "salary": 8000 }
{ "id": "ObjectID("5a3acd453fda2b7a22024ba6")", "name": "Dinesh", "age": 20, "salary": 10000 }
{ "id": "ObjectID("5a3acf023fda2b7a22024ba7")", "name": "Rajesh", "age": 40, "salary": 35000 }
{ "id": "ObjectID("5a3acf373fda2b7a22024ba8")", "name": "Nila", "age": 50, "salary": 15000 }
{ "id": "ObjectID("5a3acf653fda2b7a22024ba9")", "name": "Malar", "age": 61, "salary": 20000 }
{ "id": "ObjectID("5a3acf943fda2b7a22024baa")", "name": "Ramani", "age": 65, "salary": 20000 }
> db.details.find("age" > 50)
{ "id": "ObjectID("5a3acc833fda2b7a22024ba5")", "name": "Ragu", "age": 18, "salary": 8000 }
{ "id": "ObjectID("5a3acd453fda2b7a22024ba6")", "name": "Dinesh", "age": 20, "salary": 10000 }
{ "id": "ObjectID("5a3acf023fda2b7a22024ba7")", "name": "Rajesh", "age": 40, "salary": 35000 }
{ "id": "ObjectID("5a3acf373fda2b7a22024ba8")", "name": "Nila", "age": 50, "salary": 15000 }
{ "id": "ObjectID("5a3acf653fda2b7a22024ba9")", "name": "Malar", "age": 61, "salary": 20000 }
{ "id": "ObjectID("5a3acf943fda2b7a22024baa")", "name": "Ramani", "age": 65, "salary": 20000 }
> db.details.find("age" > 50)
2017-12-20T21:08:54.924+0000 E QUERY [thread1] SyntaxError: missing : after property id @shell):1:23
> db.details.find({age:$gt: 50})
2017-12-20T21:21:21.541+0000 E QUERY [thread1] SyntaxError: missing : after property id @shell):1:20
> db.details.find({age:$gt: 50})
{ "id": "ObjectID("5a3acf653fda2b7a22024ba9")", "name": "Malar", "age": 61, "salary": 20000 }
{ "id": "ObjectID("5a3acf943fda2b7a22024baa")", "name": "Ramani", "age": 65, "salary": 20000 }
> clear
2017-12-20T21:22:27.014+0000 E QUERY [thread1] ReferenceError: clear is not defined :
@shell):1:1
>
> db.details.find({age:$gt: 50})
{ "id": "ObjectID("5a3acf653fda2b7a22024ba9")", "name": "Malar", "age": 61, "salary": 20000 }
{ "id": "ObjectID("5a3acf943fda2b7a22024baa")", "name": "Ramani", "age": 65, "salary": 20000 }
> db.details.find({age:$lt: 50})
{ "id": "ObjectID("5a3acc833fda2b7a22024ba5")", "name": "Ragu", "age": 18, "salary": 8000 }
{ "id": "ObjectID("5a3acd453fda2b7a22024ba6")", "name": "Dinesh", "age": 20, "salary": 10000 }
{ "id": "ObjectID("5a3acf023fda2b7a22024ba7")", "name": "Rajesh", "age": 40, "salary": 35000 }
> db.details.find({salary:20000})
2017-12-20T21:26:11.984+0000 E QUERY [thread1] SyntaxError: missing : after property id @shell):1:30
>
> db.details.find({salary:{Seq: 20000}})
{ "id": "ObjectID("5a3acf653fda2b7a22024ba9")", "name": "Malar", "age": 61, "salary": 20000 }
{ "id": "ObjectID("5a3acf943fda2b7a22024baa")", "name": "Ramani", "age": 65, "salary": 20000 }
> db.details.find({salary:{Slte: 20000}})
{ "id": "ObjectID("5a3acc833fda2b7a22024ba5")", "name": "Ragu", "age": 18, "salary": 8000 }
{ "id": "ObjectID("5a3acd453fda2b7a22024ba6")", "name": "Dinesh", "age": 20, "salary": 10000 }
{ "id": "ObjectID("5a3acf373fda2b7a22024ba8")", "name": "Nila", "age": 50, "salary": 15000 }
{ "id": "ObjectID("5a3acf653fda2b7a22024ba9")", "name": "Malar", "age": 61, "salary": 20000 }
{ "id": "ObjectID("5a3acf943fda2b7a22024baa")", "name": "Ramani", "age": 65, "salary": 20000 }
> db.details.find({salary:{Slr: 20000}})
{ "id": "ObjectID("5a3acc833fda2b7a22024ba5")", "name": "Ragu", "age": 18, "salary": 8000 }
{ "id": "ObjectID("5a3acd453fda2b7a22024ba6")", "name": "Dinesh", "age": 20, "salary": 10000 }
{ "id": "ObjectID("5a3acf373fda2b7a22024ba8")", "name": "Nila", "age": 50, "salary": 15000 }
> db.details.find({salary:{Sgt: 20000}})
{ "id": "ObjectID("5a3acf023fda2b7a22024ba7")", "name": "Rajesh", "age": 40, "salary": 35000 }
>
>
>
```

- 1) Age < 50 & Salary > 20000/=
- 2) Age < 50 or Salary > 20000/=
- 3) Age < 20 or Salary >= 10000/=
- 4) Age <= 20 and Salary >= 10000/=

```

ukistu05@UKIPC05:~$ sudo mongo
MongoDB shell version: 3.2.18
connecting to: test
Server has startup warnings:
2017-12-20T22:42:33.069+0800 I CONTROL [initandlisten]
2017-12-20T22:42:33.069+0800 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/enabled is 'always'.
2017-12-20T22:42:33.069+0800 I CONTROL [initandlisten] ** We suggest setting it to 'never'
> use person
switched to db person
> show collections
details
> db.details.find({"$and": [{ "age":{$lt: 50}}, {"salary":{$gt: 20000}} ]})
... ^C
> db.details.find()
{"_id": ObjectId("5a3acc833fd2b7a22024ba5"), "name": "Ragu", "age": 18, "salary": 8000 }
{"_id": ObjectId("5a3acd453fd2b7a22024ba6"), "name": "Dhesh", "age": 20, "salary": 10000 }
{"_id": ObjectId("5a3acf023fd2b7a22024ba7"), "name": "Rajesh", "age": 40, "salary": 35000 }
{"_id": ObjectId("5a3acf73fd2b7a22024ba8"), "name": "Nila", "age": 50, "salary": 15000 }
{"_id": ObjectId("5a3acf653fd2b7a22024ba9"), "name": "Halar", "age": 61, "salary": 20000 }
{"_id": ObjectId("5a3acf943fd2b7a22024baa"), "name": "Ranant", "age": 65, "salary": 20000 }
> db.details.find({"age":{$lt: 50}, {"salary":{$gt: 20000}})
{"_id": ObjectId("5a3acf023fd2b7a22024ba7"), "name": "Rajesh", "age": 40, "salary": 35000 }
> db.details.find({"$or":[{"age":{$lt: 50}, {"salary":{$gt: 20000}}]})
... ^C
> db.details.find({"$or":[{"age":{$lt: 50}, {"salary":{$gt: 20000}}]})
{"_id": ObjectId("5a3acc833fd2b7a22024ba5"), "name": "Ragu", "age": 18, "salary": 8000 }
{"_id": ObjectId("5a3acd453fd2b7a22024ba6"), "name": "Dhesh", "age": 20, "salary": 10000 }
> db.details.find({"$or":[{"age":{$lt: 50}, {"salary":{$gt: 20000}}]})
2017-12-20T23:20:46.886+0800 E QUERY [thread1] SyntaxError: illegal character @(shell):1:17
> db.details.find({"$or":[{"age":{$lt: 50}, {"salary":{$gt: 20000}}]})
{"_id": ObjectId("5a3acc833fd2b7a22024ba5"), "name": "Ragu", "age": 18, "salary": 8000 }
{"_id": ObjectId("5a3acd453fd2b7a22024ba6"), "name": "Dhesh", "age": 20, "salary": 10000 }
{"_id": ObjectId("5a3acf023fd2b7a22024ba7"), "name": "Rajesh", "age": 40, "salary": 35000 }
> db.details.find({"$or":[{"age":{$lt: 20}, {"salary":{$gte: 10000}}]})
{"_id": ObjectId("5a3acc833fd2b7a22024ba5"), "name": "Ragu", "age": 18, "salary": 8000 }
{"_id": ObjectId("5a3acd453fd2b7a22024ba6"), "name": "Dhesh", "age": 20, "salary": 10000 }
{"_id": ObjectId("5a3acf023fd2b7a22024ba7"), "name": "Rajesh", "age": 40, "salary": 35000 }
{"_id": ObjectId("5a3acf73fd2b7a22024ba8"), "name": "Nila", "age": 50, "salary": 15000 }
{"_id": ObjectId("5a3acf653fd2b7a22024ba9"), "name": "Halar", "age": 61, "salary": 20000 }
{"_id": ObjectId("5a3acf943fd2b7a22024baa"), "name": "Ranant", "age": 65, "salary": 20000 }
> db.details.find({"age":{$lte: 20}, {"salary":{$gte: 10000}})
2017-12-20T23:27:11.235+0800 E QUERY [thread1] SyntaxError: missing ) after argument list @(shell):1:16
> db.details.find({"age":{$lte: 20}, {"salary":{$gte: 10000}})
Error: error:
  "warnings": NumberLong(0),
  "ok": 0,
  "errmsg": "Unsupported projection option: salary: { $gte: 10000.0 }",
  "code": 2
}
> db.details.find({"age":{$lte: 20}, {"salary":{$gte: 10000}})
{"_id": ObjectId("5a3acd453fd2b7a22024ba6"), "name": "Dhesh", "age": 20, "salary": 10000 }

```