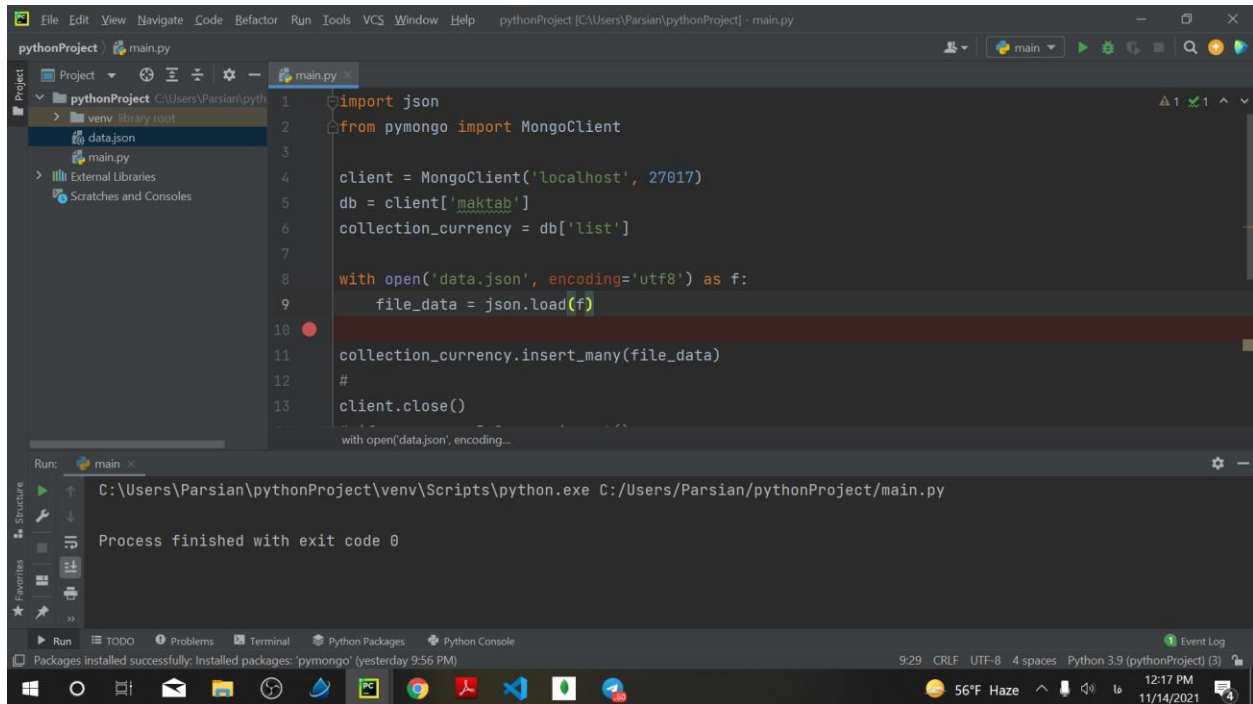


queries:

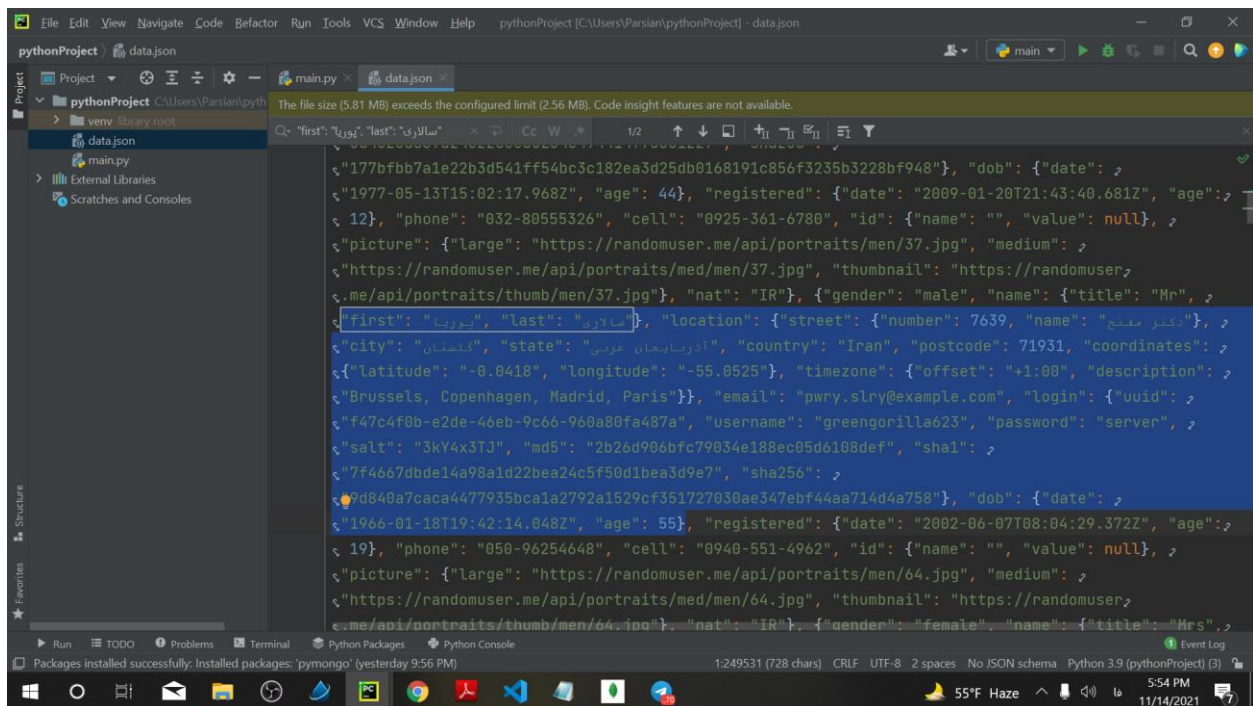


```
1 import json
2 from pymongo import MongoClient
3
4 client = MongoClient('localhost', 27017)
5 db = client['maktab']
6 collection_currency = db['list']
7
8 with open('data.json', encoding='utf8') as f:
9     file_data = json.load(f)
10
11 collection_currency.insert_many(file_data)
12 #
13 client.close()
```

Run: main

C:\Users\Parsian\pythonProject\venv\Scripts\python.exe C:/Users/Parsian/pythonProject/main.py

Process finished with exit code 0



```
Q: "first": "یوزنا", "last": "سالاری", "location": {"street": {"number": 7639, "name": "دکتر منتج", "city": "قم", "state": "آذربایجان غربی", "country": "Iran", "postcode": 71931, "coordinates": {"latitude": "-0.0418", "longitude": "-55.0525", "timezone": {"offset": "+1:00", "description": "Brussels, Copenhagen, Madrid, Paris"}}, "email": "pwry.sly@example.com", "login": {"uuid": "f47c4f0b-e2de-46eb-9c66-960a80fa487a", "username": "greengorilla623", "password": "server", "salt": "3KY4x3TJ", "md5": "2b26d906bfc79034e188ec05d6108def", "sha1": "7f4667dbde14a98a1d22bea24c5f50d1bea3d9e7", "sha256": "d840a7caca4477935bca1a2792a1529cf351727030ae347ebf44aa714d4a758"}, "dob": {"date": "1966-01-18T19:42:14.048Z", "age": 55}, "registered": {"date": "2002-06-07T08:04:29.372Z", "age": 19}, "phone": "050-96254648", "cell": "0940-551-4962", "id": {"name": "", "value": null}, "picture": {"large": "https://randomuser.me/api/portraits/men/64.jpg", "medium": "https://randomuser.me/api/portraits/med/men/64.jpg", "thumbnail": "https://randomuser.me/api/portraits/thumb/men/64.jpg", "nat": "IR", "gender": "female", "name": {"title": "Mrs",
```

```
CAProgram Files\MongoDB\Server\5.0\bin\mongo.exe
Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()

---
WARNING: some history file lines were truncated at 4095 bytes.
> show dbs
admin      0.000GB
config     0.000GB
local      0.000GB
maktab     0.003GB
maktab_61  0.000GB
> use maktab
switched to db maktab
> db.list.find().pretty()
{
  "_id" : ObjectId("619007f2ebd3ff77c47d8b6b"),
  "gender" : "female",
  "name" : {
    "title" : "Mrs",
    "first" : "XXXXXXXX",
    "last" : "XXXXXXXXXX"
  },
  "location" : {
    "street" : {
      "number" : 8521,
      "name" : "XXXXX XXXXXX"
    },
    "city" : "XXX XXXX",
    "state" : "XXXXXXXXX XXXXXXXXXX",
    "country" : "Iran",
    "postcode" : 99412,
    "coordinates" : {
      "latitude" : "4.6035",
      "longitude" : "175.7687"
    }
  }
}
```

show dbs

admin 0.000GB

config 0.000GB

local 0.000GB

maktab 0.003GB

maktab_61 0.000GB

<use maktab

switched to db maktab

<db.list.find().pretty()

.1

```
***db.list.aggregate]]{$unwind:"$dob"},{$match : {"dob.age" : {$gt:50 }},{$unwind:"$location"}$},match :
"}location.city,{ {"گلستان" : "{$unwind : "$name"},{$project: {_id:0, "name.first" : 1 , "name.last" : 1 } }(
```

```
*db.list.aggregate([{$unwind : "$name"},{$project: {_id:0, "name.last" : 1,"location" : 1, "phone":1
}},{$unwind : "$registered"},{$match : {"registered.age" : {$gt:20} }}]).pretty()
```

```
*db.list.aggregate([{$unwind : "$name"},{$project: {_id:0, "name.last" : 1,"location" : 1, "phone":1
}},{$unwind : "$registered"},{$project : {"registered.age" : 1 }}]).pretty()
```

.2

```
***db.list.aggregate([{$unwind:"$registered"},{$match : {"registered.age" : {$gt:20} }},{$unwind :
"$name"},{$project: {_id:0, "name.last" : 1, "location" : 1 , "phone":1}}]).pretty()
```

.3

```
db.list.aggregate([{$match: {$expr: {$and: [{$eq: [{$dayOfMonth: {date: {$dateFromString: {dateString:
'$dob.date'}}} }, {$dayOfMonth: new Date ( )} ]},{ $eq: [{$month: {date: {$dateFromString: {dateString:
'$dob.date'}}} }, { $month: new Date ( )} ]}}]}, {$project:{_id:0,name:1, email:1, dob:1}}]).pretty()
```

```
***db.list.aggregate([{$match: {$expr: {$and: [{$eq: [{$dayOfMonth: {date: {$dateFromString: {dateString:
'$dob.date'}}} }, {$dayOfMonth: new Date ( )} ]},{ $eq: [{$month: {date: {$dateFromString: {dateString:
'$dob.date'}}} }, { $month: new Date ( )} ]}}]},{$unwind:"$name"},{$unwind:"$dob"},
{$project:{_id:0,"name.first":1,"name.last":1, email:1, "dob.date":1}}]).pretty()
```

```
.4db.list.aggregate([{$group:{_id :"$location.state",total_residence:{$sum:1}}}}])
```

```
.5db.list.aggregate([{$group:{_id :"$location.city",total_residence:{$sum:1}}},{ $sort:{total_residence:-1}}])
```

```
db.list.aggregate([ { $unwind: "$location" }, { $group: { _id: "$location.city", "Total": { $sum: 1 } } }, { $group: {
_id:"", minimum: { $min: '$Total' }, maximum: { $max: '$Total' } } },{$project :{_id :
0,"location.city":1,maximum:1,minimum:1} } ])
```

second way:

```
db.list.aggregate([{$facet:{'maximum':[{$group: {'_id': '$location.city', 'count': {'$sum': 1}}},
{'$sort':{'count' : -1}} ,{'$limit' : 1}}, 'minimum': [{$group: {'_id': '$location.city', 'count': {'$sum':
1}}},{'$sort': {'count': 1}}, {'$limit': 1}}]})
```

answer:

```
{ "maximum" : [ { "_id" : "بیرجند", "count" : 118 } ], "minimum" : [ { "_id" : "سنندج", "count" : 72 } ] }
```

```
.6db.list.aggregate([{$unwind:'$location'},{$unwind:'$dob'},{$group:{$_id
:'$location.city',avg_age:{$avg:'$dob.age'}}})
```

compare tehran with other cities:

```
db.list.aggregate([{$unwind:'$location'},{$unwind:'$dob'},{$group:{$_id
:'$location.city',avg_age:{$avg:'$dob.age'}}},{$project:{comp: { $cmp: [ "$avg_age", 46.36842105263158 ]
}}})
```

.7

```
db.list.aggregate([{$unwind:'$dob'},{$match : {"dob.age" : {$lt:16 } }},{$unwind : "$name"},{$project: { _id:0,
"name.first" : 1, "name.last" : 1}}]).pretty()
```

```
db.list.aggregate([{$unwind:'$dob'},{$project :{result: { $and: [ { $gt: [ "$dob.age", 16 ] }, { $lt: [ "$dob.age",
40 ] } ] } } })
```

```
db.list.aggregate([{$unwind:"$dob"},{$project:{$_id:0,"name.first":1,"name.last":1,result:{$and:[$gt: ["$dob.age", 16 ], {$lt: ["$dob.age", 40 ] } ] }}}])
```

final answer:

```
***db.list.aggregate([{$unwind:"$dob"},{$project : { _id:0,"name.first":1,"name.last":1,"youth":{$lt:["$dob.age", 16]}, "middle_aged":{$and:[{$gt:["$dob.age", 16]},{$lt:["$dob.age", 40]}]}, "old":{$gt:["$dob.age", 40]} } ]])
```

```
< .8db.newCollection.count()
```

5000

captures:

.1

}

```
    "id": ObjectId("619007f2ebd3ff77c47d0b6b"),
```

```
"gender": "female,"
```

```
"      name} : "
```

" title" : "Mrs,"

" : "أوينا" first,

" : "کامیاران"last"

, {

" location} : "

```
"      street} : "
```

```
"number": 8521,
```

" : "اقبال لاہوری" name"

, {

```
"      city,"نجف آباد" : "
"      state,"سیستان و بلوچستان" : "
"      country" : "Iran,"
"      postcode" : 99412,
"      coordinates} : "
"          latitude" : "4.6035,"
"          longitude" : "175.7687"
,{
"      timezone} : "
"          offset" : "+5:45,"
"          description" : "Kathmandu"
{
,{
"      email" : "awyn.kmyrn@example.com,"
"      login} : "
"          uuid" : "186cd1c7-f510-45da-b1d1-69fdb34843f,"
"          username" : "beautifulgorilla606,"
"          password" : "skolko,"
"          salt" : "what2PBg,"
"          md5" : "f55f1d4e5af361ada127167588c49aee,"
"          sha1" : "777fd2f3d9deabb8096612d497ca8d62f3cf7df2,"
"          sha256" : "335d3cc6eab82ca1a94c1a60a718c88955cba34c486c6e2176253b0b96a3012a"
,{
"      dob} : "
"          date" : "1997-08-26T06:18:39.889Z,"
"          age" : 24
,{
"      registered} : "
```

```

"      date" : "2016-10-04T06:37:18.004Z,"
"      age" : 5
,{
"      phone" : "062-25229103,"
"      cell" : "0906-504-1696,"
"      id} : "
"      name,"" : "
"      value" : null
,{
"      picture} : "
"      large" : "https://randomuser.me/api/portraits/women/70.jpg,"
"      medium" : "https://randomuser.me/api/portraits/med/women/70.jpg,"
"      thumbnail" : "https://randomuser.me/api/portraits/thumb/women/70.jpg"
,{
"      nat" : "IR"
{

```

.2no people registered for more than 20 years

.3

```

db.list.aggregate([{$match: {$expr: {$and: [{$eq: [{$dayOfMonth: {date: {$dateFromString: {dateString:
'dob.date'}}}}, {$dayOfMonth: new Date ( )} ]},{$eq: [{$month: {date: {$dateFromString: {dateString:
'dob.date'}}}}, {$month: new Date ( )} ]}}]},{$project: {_id:0,"name.first":1,"name.last":1, email:1,
"dob.date":1}}]).pretty()

```

```

}

```

```

"      name} : "

```

```

"      first,"عسل" : "

```

```
"      last"محمدخان" : "
,{
"      email" : "aasl.mhmdkhn@example.com,"
"      dob} : "
"      date" : "1945-11-16T07:50:04.384Z"
{
{
}
"      name} : "
"      first,"رها" : "
"      last"نکو نظر" : "
,{
"      email" : "rh.nkwnzr@example.com,"
"      dob} : "
"      date" : "1982-11-16T13:59:17.946Z"
{
{
}
"      name} : "
"      first,"تینا" : "
"      last"رضایی" : "
,{
"      email" : "tyn.rdy@example.com,"
"      dob} : "
"      date" : "1963-11-16T10:39:11.526Z"
{
{
}
```



```
"    name} : "  
"        first,"رهام" : "  
"        last"رضایی" : "  
,  
{  
"    email" : "rhm.rdy@example.com,"  
"    dob} : "  
"        date" : "1976-11-16T13:51:46.948Z"  
{  
{  
}  
"    name} : "  
"        first,"سوگند" : "  
"        last"یاسمی" : "  
,  
{  
"    email" : "swgnd.ysmy@example.com,"  
"    dob} : "  
"        date" : "1948-11-16T02:57:21.820Z"  
{  
{  
}  
"    name} : "  
"        first,"رها" : "  
"        last"قاسمی" : "  
,  
{  
"    email" : "rh.qsmy@example.com,"  
"    dob} : "  
"        date" : "1978-11-16T01:58:04.652Z"  
{
```

```
{
}

"  name} : "
"      first,"کیان" : "
"      last"سهیلی راد" : "
,{
"  email" : "kyn.shylyrd@example.com,"
"  dob} : "
"      date" : "1958-11-16T09:20:15.305Z"
{
{
}
"  name} : "
"      first,"سورنا" : "
"      last"محمدخان" : "
,{
"  email" : "swrn.mhmdkhn@example.com,"
"  dob} : "
"      date" : "1948-11-16T20:14:48.276Z"
{
{
}
"  name} : "
"      first,"پر نیا" : "
"      last"یاسمی" : "
,{
"  email" : "prny.ysmy@example.com,"
"  dob} : "
```

```
"      date" : "1994-11-16T20:21:40.343Z"
{
{
}
"      name} : "
"      first,"درسا" : "
"      last"سهيلي راد" : "
,{
"      email" : "drs.shylyrd@example.com,"
"      dob} : "
"      date" : "1987-11-16T22:58:37.921Z"
{
{
}
"      name} : "
"      first,"سورنا" : "
"      last"کريمی" : "
,{
"      email" : "swrn.khrymy@example.com,"
"      dob} : "
"      date" : "1970-11-16T22:04:57.866Z"
{
{
}
"      name} : "
"      first,"عسل" : "
"      last"احمدی" : "
,{
```

```
"    email" : "aasl.hmdy@example.com,"
"    dob} : "
"        date" : "1979-11-16T01:29:43.491Z"
{
{
}
"    name} : "
"        first,"محييا" : "
"        last"نكو نظر" : "
,{
"    email" : "mhy.nkwnzr@example.com,"
"    dob} : "
"        date" : "1961-11-16T21:03:11.849Z"
{
{
}
"    name} : "
"        first,"امير علي" : "
"        last"ياسمي" : "
,{
"    email" : "myraaly.ysmy@example.com,"
"    dob} : "
"        date" : "1977-11-16T14:49:42.260Z"
{
{
}
"    name} : "
"        first,"عسل" : "
```

```
"      last"نجاتی" : "  
,{  
"      email" : "aasl.njty@example.com,"  
"      dob} : "  
"      date" : "1949-11-16T02:41:53.771Z"  
{  
{
```

.4

```
_ " }id" , "چهارمحال و بختیاری" : "total_residence" : 151{  
_ " }id" , "خراسان جنوبی" : "total_residence" : 157{  
_ " }id" , "کردستان" : "total_residence" : 175{  
_ " }id" , "گیلان" : "total_residence" : 137{  
_ " }id" , "مازندران" : "total_residence" : 164{  
_ " }id" , "آذربایجان شرقی" : "total_residence" : 160{  
_ " }id" , "اصفهان" : "total_residence" : 156{  
_ " }id" , "هرمزگان" : "total_residence" : 163{  
_ " }id" , "یزد" : "total_residence" : 171{  
_ " }id" , "گلستان" : "total_residence" : 168{  
_ " }id" , "همدان" : "total_residence" : 183{  
_ " }id" , "کرمانشاه" : "total_residence" : 174{  
_ " }id" , "سیستان و بلوچستان" : "total_residence" : 154{  
_ " }id" , "ایلام" : "total_residence" : 150{  
_ " }id" , "اردبیل" : "total_residence" : 153{  
_ " }id" , "لرستان" : "total_residence" : 157{  
_ " }id" , "تهران" : "total_residence" : 166{
```

__ }id", "فارس" : "total_residence" : 172{
__ }id", "خراسان شمالی" : "total_residence" : 137{
__ }id", "کهگیلویه و بویراحمد" : "total_residence" : 164{

Type "it" for more

<it

__ }id", "آذربایجان غربی" : "total_residence" : 160{
__ }id", "قم" : "total_residence" : 173{
__ }id", "سمنان" : "total_residence" : 179{
__ }id", "خراسان رضوی" : "total_residence" : 141{
__ }id", "زنجان" : "total_residence" : 175{
__ }id", "البرز" : "total_residence" : 172{
__ }id", "قزوین" : "total_residence" : 160{
__ }id", "بوشهر" : "total_residence" : 130{
__ }id", "کرمان" : "total_residence" : 161{
__ }id", "مرکزی" : "total_residence" : 173{
__ }id", "خوزستان" : "total_residence" : 164{

: سنندج min: بیرجند, 5max.

__ }id", "بیرجند" : "total_residence" : 118{
__ }id", "خوی" : "total_residence" : 115{
__ }id", "کرمانشاه" : "total_residence" : 115{
__ }id", "ایلام" : "total_residence" : 114{
__ }id", "گلستان" : "total_residence" : 113{
__ }id", "قزوین" : "total_residence" : 113{
__ }id", "ورامین" : "total_residence" : 112{

_ " }id" , "زنجان" : "total_residence" : 111{
_ " }id" , "تبریز" : "total_residence" : 110{
_ " }id" , "بندرعباس" : "total_residence" : 108{
_ " }id" , "کاشان" : "total_residence" : 108{
_ " }id" , "قم" : "total_residence" : 108{
_ " }id" , "شیراز" : "total_residence" : 107{
_ " }id" , "خرمآباد" : "total_residence" : 107{
_ " }id" , "یزد" : "total_residence" : 106{
_ " }id" , "آمل" : "total_residence" : 106{
_ " }id" , "بجنورد" : "total_residence" : 106{
_ " }id" , "ملارد" : "total_residence" : 105{
_ " }id" , "بابل" : "total_residence" : 105{
_ " }id" , "نجفآباد" : "total_residence" : 103{

_ " }id" , "زاهدان" : "total_residence" : 102{
_ " }id" , "اهواز" : "total_residence" : 102{
_ " }id" , "قدس" : "total_residence" : 101{
_ " }id" , "مشهد" : "total_residence" : 101{
_ " }id" , "قائمشهر" : "total_residence" : 101{
_ " }id" , "شهریار" : "total_residence" : 100{
_ " }id" , "دزفول" : "total_residence" : 100{
_ " }id" , "کرمان" : "total_residence" : 100{
_ " }id" , "همدان" : "total_residence" : 99{
_ " }id" , "کرج" : "total_residence" : 99{
_ " }id" , "نیشابور" : "total_residence" : 98{
_ " }id" , "سیرجان" : "total_residence" : 98{
_ " }id" , "بروجرد" : "total_residence" : 97{
_ " }id" , "اراک" : "total_residence" : 96{

_ " }id" , "بوشهر" : "total_residence" : 96{
_ " }id" , "تهران" : "total_residence" : 95{
_ " }id" , "قرچک" : "total_residence" : 93{
_ " }id" , "اصفهان" : "total_residence" : 93{
_ " }id" , "اردبیل" : "total_residence" : 93{
_ " }id" , "آبادان" : "total_residence" : 93{

_ " }id" , "اسلامشهر" : "total_residence" : 93{
_ " }id" , "رشت" : "total_residence" : 92{
_ " }id" , "ساری" : "total_residence" : 91{
_ " }id" , "پاکدشت" : "total_residence" : 87{
_ " }id" , "سبزوار" : "total_residence" : 86{
_ " }id" , "گرگان" : "total_residence" : 86{
_ " }id" , "ارومیه" : "total_residence" : 83{
_ " }id" , "ساوه" : "total_residence" : 82{
_ " }id" , "خمینی شهر" : "total_residence" : 81{
_ " }id" , "سنندج" : "total_residence" : 72{

.6

_ " }id" , "سبزوار" : "avg_age" : 48.02325581395349{
_ " }id" , "قدس" : "avg_age" : 51.722772277227726{
_ " }id" , "مشهد" : "avg_age" : 49.53465346534654{
_ " }id" , "قرچک" : "avg_age" : 47.096774193548384{
_ " }id" , "بروجرد" : "avg_age" : 51.11340206185567{
_ " }id" , "زاهدان" : "avg_age" : 50.35294117647059{
_ " }id" , "قائم شهر" : "avg_age" : 51.97029702970297{
_ " }id" , "ملارد" : "avg_age" : 49.87619047619047{
_ " }id" , "اراک" : "avg_age" : 51.458333333333336{

__ " }id" , "شهریار" : "avg_age" : 51.09{
__ " }id" , "تبریز" : "avg_age" : 50.6{
__ " }id" , "ورامین" : "avg_age" : 50.098214285714285{
__ " }id" , "خوی" : "avg_age" : 50.06956521739131{
__ " }id" , "بندرعباس" : "avg_age" : 50.888888888888886{
__ " }id" , "نیشابور" : "avg_age" : 50.275510204081634{
__ " }id" , "اصفهان" : "avg_age" : 50.12903225806452{
__ " }id" , "شیراز" : "avg_age" : 50.5607476635514{
__ " }id" , "بیرجند" : "avg_age" : 51.559322033898304{
__ " }id" , "کاشان" : "avg_age" : 51.0462962962963{
__ " }id" , "سیرجان" : "avg_age" : 48.88775510204081{

__ " }id" , "یزد" : "avg_age" : 51.0188679245283{
__ " }id" , "ساوه" : "avg_age" : 50.09756097560975{
__ " }id" , "کرمانشاه" : "avg_age" : 50.38260869565217{
__ " }id" , "گلستان" : "avg_age" : 50.769911504424776{
__ " }id" , "دزفول" : "avg_age" : 49.64{
__ " }id" , "ایلام" : "avg_age" : 50.24561403508772{
__ " }id" , "نجف آباد" : "avg_age" : 48.90291262135922{
__ " }id" , "اردبیل" : "avg_age" : 48.666666666666664{
__ " }id" , "سنندج" : "avg_age" : 51.94444444444444{
__ " }id" , "رشت" : "avg_age" : 50.70652173913044{
__ " }id" , "همدان" : "avg_age" : 50.06060606060606{
__ " }id" , "تهران" : "avg_age" : 46.36842105263158*****{
__ " }id" , "ارومیه" : "avg_age" : 53.40963855421687{
__ " }id" , "گرگان" : "avg_age" : 47.7093023255814{
__ " }id" , "ساری" : "avg_age" : 50.472527472527474{
__ " }id" , "آبادان" : "avg_age" : 47.11827956989247{

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    _" }id", "خرم آباد", "avg_age": 48.757009345794394{
    _" }id", "خمینی شهر", "avg_age": 50{
    _" }id", "قم", "avg_age": 46.23148148148148{
    _" }id", "کرج", "avg_age": 50.86868686868687{

    _" }id", "اهواز", "avg_age": 49{
    _" }id", "اسلام شهر", "avg_age": 52.956989247311824{
    _" }id", "زنجان", "avg_age": 49.77477477477478{
    _" }id", "آمل", "avg_age": 49.68867924528302{
    _" }id", "بابل", "avg_age": 49.523809523809526{
    _" }id", "قزوین", "avg_age": 52.008849557522126{
    _" }id", "پاکدشت", "avg_age": 48.98850574712644{
    _" }id", "بوشهر", "avg_age": 53.260416666666664{
    _" }id", "بجنورد", "avg_age": 50.54716981132076{
    _" }id", "کرمان", "avg_age": 49.66{

```

6. مقایسه

```

    _" }id", "سبزوار", "comp": 1{
    _" }id", "قدس", "comp": 1{
    _" }id", "مشهد", "comp": 1{
    _" }id", "قرچک", "comp": 1{
    _" }id", "بروجرد", "comp": 1{
    _" }id", "زاهدان", "comp": 1{
    _" }id", "قائم شهر", "comp": 1{
    _" }id", "ملارد", "comp": 1{
    _" }id", "اراک", "comp": 1{
    _" }id", "شهریار", "comp": 1{

```

__ " }id" , "تبریز" : "comp" : 1{
__ " }id" , "ورامین" : "comp" : 1{
__ " }id" , "خوی" : "comp" : 1{
__ " }id" , "بندرعباس" : "comp" : 1{
__ " }id" , "نیشابور" : "comp" : 1{
__ " }id" , "اصفهان" : "comp" : 1{
__ " }id" , "شیراز" : "comp" : 1{
__ " }id" , "بیرجند" : "comp" : 1{
__ " }id" , "کاشان" : "comp" : 1{
__ " }id" , "سیرجان" : "comp" : 1{

Type "it" for more

<it

__ " }id" , "یزد" : "comp" : 1{
__ " }id" , "ساوه" : "comp" : 1{
__ " }id" , "کرمانشاه" : "comp" : 1{
__ " }id" , "گلستان" : "comp" : 1{
__ " }id" , "دزفول" : "comp" : 1{
__ " }id" , "ایلام" : "comp" : 1{
__ " }id" , "نحف آباد" : "comp" : 1{
__ " }id" , "اردبیل" : "comp" : 1{
__ " }id" , "سنندج" : "comp" : 1{
__ " }id" , "رشت" : "comp" : 1{
__ " }id" , "همدان" : "comp" : 1{
__ " }id" , "تهران" : "comp" : 0{
__ " }id" , "ارومیه" : "comp" : 1{
__ " }id" , "گرگان" : "comp" : 1{
__ " }id" , "ساری" : "comp" : 1{
__ " }id" , "آبادان" : "comp" : 1{

```
__ " }id", "خرم آباد" : "comp" : 1{  
__ " }id", "خمینی شهر" : "comp" : 1{  
__ " }id", "قم" : "comp" : -1{  
__ " }id", "کرج" : "comp" : 1{
```

Type "it" for more

<it

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__ " }id", "اهواز" : "comp" : 1{  
__ " }id", "اسلام شهر" : "comp" : 1{  
__ " }id", "آمل" : "comp" : 1{  
__ " }id", "زنجان" : "comp" : 1{  
__ " }id", "بابل" : "comp" : 1{  
__ " }id", "قزوین" : "comp" : 1{  
__ " }id", "پاکدشت" : "comp" : 1{  
__ " }id", "بوشهر" : "comp" : 1{  
__ " }id", "بجنورد" : "comp" : 1{  
__ " }id", "کرمان" : "comp" : 1{
```

.7

```
" }name" } : "first", "پرینیا" : "last", { "مرادی" : "youth" : false, "middle_aged" : false, "old" : true{  
" }name" } : "first", "رها" : "last", { "جعفری" : "youth" : false, "middle_aged" : false, "old" : true{  
" }name" } : "first", "میلاد" : "last", { "یاسمی" : "youth" : false, "middle_aged" : false, "old" : true{  
" }name" } : "first", "بردیبا" : "last", { "صدر" : "youth" : false, "middle_aged" : false, "old" : true{  
" }name" } : "first", "عرشیا" : "last", { "کامیاران" : "youth" : false, "middle_aged" : false, "old" : true{  
" }name" } : "first", "امیرحسین" : "last", { "کریمی" : "youth" : false, "middle_aged" : true, "old" : false{  
" }name" } : "first", "دانیال" : "last", { "گلشن" : "youth" : false, "middle_aged" : false, "old" : true{  
" }name" } : "first", "کیانا" : "last", { "جعفری" : "youth" : false, "middle_aged" : false, "old" : true{  
" }name" } : "first", "علی" : "last", { "کریمی" : "youth" : false, "middle_aged" : false, "old" : true{
```

```

"name" : "first", "last" : "يسنا", {"youth" : "احمدى" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "مهراڊ", {"youth" : "صدر" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "امير", {"youth" : "ڪامروا" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "امير", {"youth" : "احمدى" : false, "middle_aged" : true, "old" : false{
"name" : "first", "last" : "دانيال", {"youth" : "گلشن" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "عرشيا", {"youth" : "قاسمى" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "هليا", {"youth" : "سالارى" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "محمدطاها", {"youth" : "حيدري" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "ڪوروش", {"youth" : "تكو نظر" : false, "middle_aged" : false, "old" : true{
"name" : "first", "last" : "مهراڊ", {"youth" : "ڪريمى" : false, "middle_aged" : true, "old" : false{
"name" : "first", "last" : "رضا", {"youth" : "محمدخان" : false, "middle_aged" : true, "old" : false{

```

8.

The screenshot shows a Python IDE with a project named 'pythonProject'. The file explorer on the left shows the project structure, including 'data.json' and 'main.py'. The main editor displays the following Python code:

```

1 import json
2 from pymongo import MongoClient
3
4 client = MongoClient('localhost', 27017)
5 db = client['maktab']
6 collection_currency = db['newCollection']
7
8 with open('data.json', encoding='utf8') as f:
9     file_data = json.load(f)
10
11 collection_currency.insert_many(file_data)
12
13 client.close()

```

The Run console at the bottom shows the command: `C:\Users\Parsian\pythonProject\venv\Scripts\python.exe C:/Users/Parsian/pythonProject/main.py`. The output indicates that the process finished with exit code 0. The status bar at the bottom shows the file encoding as UTF-8, 4 spaces, and Python 3.9 (pythonProject) (3).

```
Select C:\Program Files\MongoDB\Server\5.0\bin\mongo.exe

{
  "timezone" : {
    "offset" : "+3:00",
    "description" : "Baghdad, Riyadh, Moscow, St. Petersburg"
  },
  "email" : "ary.khmrw@example.com",
  "login" : {
    "uuid" : "1c89c3cd-eeab-4865-867b-94a3c45b396f",
    "username" : "heavypanda635",
    "password" : "gogogo",
    "salt" : "54QSFztV",
    "md5" : "3698a17dec42622c45537b603a1be1fb",
    "sha1" : "270c3c8dd11c74b833c629607f6c4396426ca2d1",
    "sha256" : "9a1108ca4a77f6190cc6121a4bfd5045e564d71fc41be97138eb6c2624f35c97"
  },
  "dob" : {
    "date" : "1958-04-01T17:13:42.323Z",
    "age" : 63
  },
  "registered" : {
    "date" : "2014-02-02T22:03:12.552Z",
    "age" : 7
  },
  "phone" : "073-37254957",
  "cell" : "0989-093-4218",
  "id" : {
    "name" : "",
    "value" : null
  },
  "picture" : {
    "large" : "https://randomuser.me/api/portraits/men/22.jpg",
    "medium" : "https://randomuser.me/api/portraits/med/men/22.jpg",
    "thumbnail" : "https://randomuser.me/api/portraits/thumb/men/22.jpg"
  },
  "nat" : "IR"
}
Type "it" for more
> db.newCollection.count()
5000
>
```