MONGO DB ASSINGMENTS

ASSIGNMENT-2

```
C:\Users\Vamsipolisetty\Downloads\mongodb-database-tools-windows-x86_64-100.5.2\bin>mongoimport --uri mongodb+srv://Vamsi:Polisetty@cluster0.ab4al.mongodb.net/population --collection zipcodes --type json --file
C:/Users/Vamsipolisetty/Downloads/zip.json
2022-02-10T17:54:32.740+0530    connected to: mongodb+srv://[**REDACTED**]@cluster0.ab4al.mongodb.net/population
2022-02-10T17:54:33.012+0530    continuing through error: E11000 duplicate key error collection: population.zipcodes index: _id_ dup key: { _id: "01001" }
2022-02-10T17:54:35.741+0530    [####................] population.zipcodes  539KB/3.03MB (17.3%)
2022-02-10T17:54:38.741+0530    [######..............] population.zipcodes  859KB/3.03MB (27.6%)
2022-02-10T17:54:41.741+0530    [#########...........] population.zipcodes  1.15MB/3.03MB (37.9%)
2022-02-10T17:54:44.741+0530    [###########.........] population.zipcodes  1.46MB/3.03MB (48.2%)
2022-02-10T17:54:47.741+0530    [##############......] population.zipcodes  1.77MB/3.03MB (58.4%)
2022-02-10T17:54:50.740+0530    [################....] population.zipcodes  2.08MB/3.03MB (68.5%)
2022-02-10T17:54:53.741+0530    [##################..] population.zipcodes  2.39MB/3.03MB (78.7%)
2022-02-10T17:54:56.742+0530    [####################] population.zipcodes  2.70MB/3.03MB (88.8%)
2022-02-10T17:54:59.741+0530    [####################] population.zipcodes  3.00MB/3.03MB (98.9%)
2022-02-10T17:55:01.454+0530    [####################] population.zipcodes  3.03MB/3.03MB (100.0%)
2022-02-10T17:55:01.455+0530    29352 document(s) imported successfully. 1 document(s) failed to import.
```

ATLANTA

```
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.find({state:"GA",city:"ATLANTA"})
[
  {
    _id: '30305',
    city: 'ATLANTA',
    loc: [ -84.385145, 33.831963 ],
    pop: 19122,
    state: 'GA'
  },
  {
    _id: '30306',
    city: 'ATLANTA',
    loc: [ -84.351418, 33.786027 ],
    pop: 20081,
    state: 'GA'
  },
  {
    _id: '30307',
    city: 'ATLANTA',
    loc: [ -84.335957, 33.769138 ],
    pop: 16330,
    state: 'GA'
  },
  {
    _id: '30303',
    city: 'ATLANTA',
    loc: [ -84.388846, 33.752504 ],
    pop: 1845,
    state: 'GA'
  },
  {
    _id: '30308',
    city: 'ATLANTA',
    loc: [ -84.375744, 33.771839 ],
    pop: 8549,
    state: 'GA'
  },
  {
    _id: '30312',
    city: 'ATLANTA',
    loc: [ -84.378125, 33.746749 ],
    pop: 17683,
    state: 'GA'
  },
  {
    _id: '30315',
    city: 'ATLANTA',
    loc: [ -84.380771, 33.705062 ],
    pop: 41061,
    state: 'GA'
```

```
  {
    _id: '30316',
    city: 'ATLANTA',
    loc: [ -84.333913, 33.721686 ],
    pop: 34668,
    state: 'GA'
  },
  {
    _id: '30318',
    city: 'ATLANTA',
    loc: [ -84.445432, 33.786454 ],
    pop: 53894,
    state: 'GA'
  },
  {
    _id: '30317',
    city: 'ATLANTA',
    loc: [ -84.31685, 33.749788 ],
    pop: 16395,
    state: 'GA'
  },
  {
    _id: '30310',
    city: 'ATLANTA',
    loc: [ -84.423173, 33.727849 ],
    pop: 34017,
    state: 'GA'
  },
  {
    _id: '30324',
    city: 'ATLANTA',
    loc: [ -84.354867, 33.820609 ],
    pop: 15044,
    state: 'GA'
  },
  {
    _id: '30326',
    city: 'ATLANTA',
    loc: [ -84.358232, 33.848168 ],
    pop: 125,
    state: 'GA'
  },
  {
    _id: '30327',
    city: 'ATLANTA',
    loc: [ -84.419966, 33.862723 ],
    pop: 18467,
    state: 'GA'
  },
  {
```

```
  },
  {
    _id: '30314',
    city: 'ATLANTA',
    loc: [ -84.425546, 33.756103 ],
    pop: 26649,
    state: 'GA'
  },
  {
    _id: '30313',
    city: 'ATLANTA',
    loc: [ -84.39352, 33.76825 ],
    pop: 8038,
    state: 'GA'
  },
  {
    _id: '30309',
    city: 'ATLANTA',
    loc: [ -84.388338, 33.798407 ],
    pop: 14766,
    state: 'GA'
  },
  {
    _id: '30311',
    city: 'ATLANTA',
    loc: [ -84.470219, 33.722957 ],
    pop: 34880,
    state: 'GA'
  },
  {
    _id: '30334',
    city: 'ATLANTA',
    loc: [ -84.388188, 33.74715 ],
    pop: 0,
    state: 'GA'
  },
  {
    _id: '30319',
    city: 'ATLANTA',
    loc: [ -84.335091, 33.868728 ],
    pop: 32138,
    state: 'GA'
  }
]
Type "it" for more
```

```
]
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([{$match:{$and:[{state:"GA"},{city:"ATLANTA"}]}}])
[
  {
    _id: '30305',
    city: 'ATLANTA',
    loc: [ -84.385145, 33.831963 ],
    pop: 19122,
    state: 'GA'
  },
  {
    _id: '30306',
    city: 'ATLANTA',
    loc: [ -84.351418, 33.786027 ],
    pop: 20081,
    state: 'GA'
  },
  {
    _id: '30307',
    city: 'ATLANTA',
    loc: [ -84.335957, 33.769138 ],
    pop: 16330,
    state: 'GA'
  },
  {
    _id: '30303',
    city: 'ATLANTA',
    loc: [ -84.388846, 33.752504 ],
    pop: 1845,
    state: 'GA'
  },
  {
    _id: '30308',
    city: 'ATLANTA',
    loc: [ -84.375744, 33.771839 ],
    pop: 8549,
    state: 'GA'
  },
  {
    _id: '30312',
    city: 'ATLANTA',
    loc: [ -84.378125, 33.746749 ],
    pop: 17683,
    state: 'GA'
  },
  {
    _id: '30315',
    city: 'ATLANTA',
    loc: [ -84.380771, 33.705062 ],
    pop: 41061,
```

```
      {
        _id: ObjectId("620274473a049acdb3bf52c4"),
        title: 'Inglorious Basterds',
        writer: 'Quentin Tarantino',
        year: 2009,
        actors: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
      }
]
Atlas atlas-z7l76e-shard-0 [primary] mongo_practice> db.movies.find({title : "The Hobbit"})

Atlas atlas-z7l76e-shard-0 [primary] mongo_practice> db.movies.find({franchise : "The Hobbit"})
[
      {
        _id: ObjectId("620274473a049acdb3bf52c5"),
        title: 'The Hobbit: An Unexpected Journey',
        writer: 'J.R.R. Tolkein',
        year: 2012,
        franchise: 'The Hobbit'
      },
      {
        _id: ObjectId("620274473a049acdb3bf52c6"),
        title: 'The Hobbit: The Desolation of Smaug',
        writer: 'J.R.R. Tolkein',
        year: 2013,
        franchise: 'The Hobbit'
      },
      {
        _id: ObjectId("620274473a049acdb3bf52c7"),
        title: 'The Hobbit: The Battle of the Five Armies',
        writer: 'J.R.R. Tolkein',
        year: 2012,
        franchise: 'The Hobbit',
        synopsis: 'Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness.'
      }
]
Atlas atlas-z7l76e-shard-0 [primary] mongo_practice> db.movies.({"year" :{$in:["1990","1999"]}})
Uncaught:
SyntaxError: Unexpected token (1:10)

> 1 | db.movies.({"year" :{$in:["1990","1999"]}})
            ^
  2 |
```

```
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([
... {$group:{_id:{city:"$city"}}},
... {$count:"ATLANTA"}
... ])
[ { ATLANTA: 16584 } ]
```

```
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([ {$group:{_id:{city:"ATLANTA"}, pop:{$sum:"$pop"}}}])
[ { _id: { city: 'ATLANTA' }, pop: 248408400 } ]
```

STATE

```
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([ { $group: { _id: { state: "$state" }, pop: { $sum: "$pop" } } }])
[
  { _id: { state: 'CT' }, pop: 3287116 },
  { _id: { state: 'MD' }, pop: 4781379 },
  { _id: { state: 'NJ' }, pop: 7730188 },
  { _id: { state: 'MA' }, pop: 6016425 },
  { _id: { state: 'AL' }, pop: 4040587 },
  { _id: { state: 'ND' }, pop: 638272 },
  { _id: { state: 'GA' }, pop: 6478216 },
  { _id: { state: 'WI' }, pop: 4891769 },
  { _id: { state: 'KS' }, pop: 2475285 },
  { _id: { state: 'AR' }, pop: 2350725 },
  { _id: { state: 'WY' }, pop: 453528 },
  { _id: { state: 'CA' }, pop: 29754890 },
  { _id: { state: 'NY' }, pop: 17990402 },
  { _id: { state: 'MT' }, pop: 798948 },
  { _id: { state: 'MO' }, pop: 5110648 },
  { _id: { state: 'RI' }, pop: 1003218 },
  { _id: { state: 'CO' }, pop: 3293755 },
  { _id: { state: 'NV' }, pop: 1201833 },
  { _id: { state: 'HI' }, pop: 1108229 },
  { _id: { state: 'OK' }, pop: 3145585 }
]
Type "it" for more
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([ { $group: { _id: { state: "$state" , pop: { $sum: "$pop" } }} },{$sort:{pop:-1}}])
[
  { _id: { state: 'WV', pop: 8645 } },
  { _id: { state: 'MD', pop: 30601 } },
  { _id: { state: 'AL', pop: 2683 } },
  { _id: { state: 'TX', pop: 489 } },
  { _id: { state: 'PA', pop: 6189 } },
  { _id: { state: 'NV', pop: 30271 } },
  { _id: { state: 'GA', pop: 28739 } },
  { _id: { state: 'WV', pop: 1215 } },
  { _id: { state: 'MN', pop: 536 } },
  { _id: { state: 'NV', pop: 19276 } },
  { _id: { state: 'AR', pop: 31048 } },
  { _id: { state: 'FL', pop: 28624 } },
  { _id: { state: 'CA', pop: 7702 } },
  { _id: { state: 'MT', pop: 8328 } },
  { _id: { state: 'AL', pop: 32896 } },
  { _id: { state: 'IL', pop: 1272 } },
  { _id: { state: 'OH', pop: 26613 } },
  { _id: { state: 'CA', pop: 26418 } },
  { _id: { state: 'OH', pop: 7706 } },
  { _id: { state: 'WV', pop: 1148 } }
]
Type "it" for more
```

```
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([ { $group: { _id: { state: "$state" }, pop: { $sum: "$pop" } } },{$sort:{pop:-1}},{$limit:3}])
[
  { _id: { state: 'CA' }, pop: 29754890 },
  { _id: { state: 'NY' }, pop: 17990402 },
  { _id: { state: 'TX' }, pop: 16984601 }
]
```

CITY

Type "it" for more
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([{ $group: { _id: { state: "$state", city: "$city" }, pop: { $sum: "$pop" } } }])
[
  { _id: { state: 'NC', city: 'BEAR CREEK' }, pop: 3894 },
  { _id: { state: 'NC', city: 'LAUREL HILL' }, pop: 5726 },
  { _id: { state: 'OH', city: 'HEBRON' }, pop: 7920 },
  { _id: { state: 'SD', city: 'BRENTFORD' }, pop: 257 },
  { _id: { state: 'VA', city: 'CALLANDS' }, pop: 2143 },
  { _id: { state: 'MI', city: 'AUBURN' }, pop: 6154 },
  { _id: { state: 'CA', city: 'KINGSBURG' }, pop: 12263 },
  { _id: { state: 'NJ', city: 'LANOKA HARBOR' }, pop: 5473 },
  { _id: { state: 'OH', city: 'UHRICHSVILLE' }, pop: 6925 },
  { _id: { state: 'CA', city: 'STANDISH' }, pop: 340 },
  { _id: { state: 'NY', city: 'KING FERRY' }, pop: 979 },
  { _id: { state: 'ID', city: 'PLUMMER' }, pop: 1439 },
  { _id: { state: 'PA', city: 'FRIENDSVILLE' }, pop: 1844 },
  { _id: { state: 'IN', city: 'INDIANAPOLIS' }, pop: 348868 },
  { _id: { state: 'NY', city: 'HILLSDALE' }, pop: 3084 },
  { _id: { state: 'VA', city: 'CLINTWOOD' }, pop: 7866 },
  { _id: { state: 'CO', city: 'CONIFER' }, pop: 5919 },
  { _id: { state: 'SC', city: 'GARNETT' }, pop: 61 },
  { _id: { state: 'OH', city: 'LUDLOW FALLS' }, pop: 1888 },
  { _id: { state: 'MO', city: 'MANSFIELD' }, pop: 3368 }
]
Type "it" for more
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([{ $group: { _id: { state: "$state", city: "$city" }, pop: { $sum: "$pop" } } },{$sort:{pop:-1}}])
[
  { _id: { state: 'IL', city: 'CHICAGO' }, pop: 2452177 },
  { _id: { state: 'NY', city: 'BROOKLYN' }, pop: 2300504 },
  { _id: { state: 'CA', city: 'LOS ANGELES' }, pop: 2102295 },
  { _id: { state: 'TX', city: 'HOUSTON' }, pop: 2095918 },
  { _id: { state: 'PA', city: 'PHILADELPHIA' }, pop: 1610956 },
  { _id: { state: 'NY', city: 'NEW YORK' }, pop: 1476790 },
  { _id: { state: 'NY', city: 'BRONX' }, pop: 1209548 },
  { _id: { state: 'CA', city: 'SAN DIEGO' }, pop: 1049298 },
  { _id: { state: 'MI', city: 'DETROIT' }, pop: 963243 },
  { _id: { state: 'TX', city: 'DALLAS' }, pop: 940191 },
  { _id: { state: 'AZ', city: 'PHOENIX' }, pop: 890853 },
  { _id: { state: 'FL', city: 'MIAMI' }, pop: 825232 },
  { _id: { state: 'CA', city: 'SAN JOSE' }, pop: 816653 },
  { _id: { state: 'TX', city: 'SAN ANTONIO' }, pop: 811792 },
  { _id: { state: 'MD', city: 'BALTIMORE' }, pop: 733081 },
  { _id: { state: 'CA', city: 'SAN FRANCISCO' }, pop: 723993 },
  { _id: { state: 'TN', city: 'MEMPHIS' }, pop: 632837 },
  { _id: { state: 'CA', city: 'SACRAMENTO' }, pop: 628279 },
  { _id: { state: 'FL', city: 'JACKSONVILLE' }, pop: 610160 },
  { _id: { state: 'GA', city: 'ATLANTA' }, pop: 609591 }
]
Type "it" for more

Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([{ $group: { _id: { state: "$state", city: "$city" }, pop: { $sum: "$pop" } } },{$sort:{pop:-1}},{$limit:3}])
[
  { _id: { state: 'IL', city: 'CHICAGO' }, pop: 2452177 },
  { _id: { state: 'NY', city: 'BROOKLYN' }, pop: 2300504 },
  { _id: { state: 'CA', city: 'LOS ANGELES' }, pop: 2102295 }
]
Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([{$match:{state:"TX"}},{$group:{_id:{city:"$city",totalPop:{$sum:"$pop"}}}}
... {$sort:{totalpop:-1}},{$limit:3}])
Uncaught:
SyntaxError: Unexpected token, expected "," (2:0)

  1 | db.zipcodes.aggregate([{$match:{state:"TX"}},{$group:{_id:{city:"$city",totalPop:{$sum:"$pop"}}}}
> 2 | {$sort:{totalpop:-1}},{$limit:3}])
    | ^
  3 |

Atlas atlas-z7l76e-shard-0 [primary] population> db.zipcodes.aggregate([{$match:{state:"TX"}},{$group:{_id:{city:"$city",totalPop:{$sum:"$pop"}}}}, {$sort:{totalpop:-1}},{$limit:3}])
[
  { _id: { city: 'IOLA', totalPop: 1418 } },
  { _id: { city: 'SAN ANTONIO', totalPop: 58355 } },
  { _id: { city: 'FORT WORTH', totalPop: 44032 } }
]