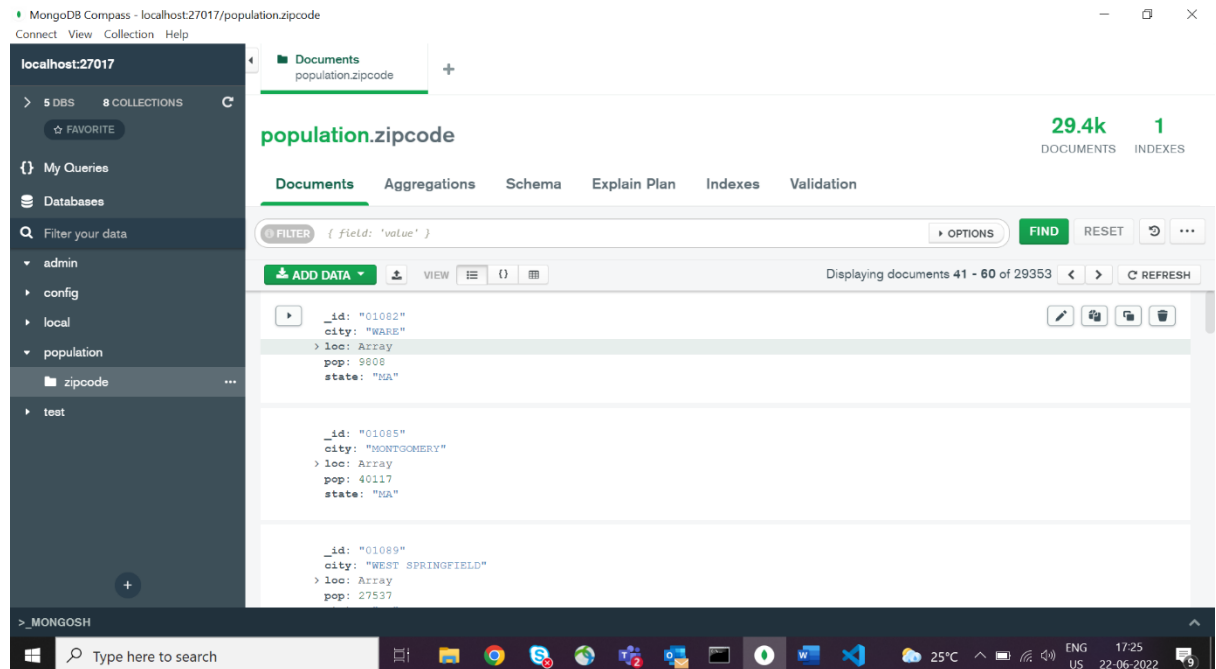


Yogesh Tamshete mongo Assignment2

- Import the zips.json file into your MongoDB. Database name is "population" and collection name is "zipcode".:-



ATLANTA City :

```
> db.zipcode.find({city:"ATLANTA",state:"GA"})
```

```
{ "_id" : "30303", "city" : "ATLANTA", "loc" : [ -84.388846, 33.752504 ], "pop" : 1845, "state" : "GA" }
```

```
{ "_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" : "30308", "city" : "ATLANTA", "loc" : [ -84.375744, 33.771839 ], "pop" : 8549, "state" : "GA" }
```

```
{ "_id" : "30309", "city" : "ATLANTA", "loc" : [ -84.388338, 33.798407 ], "pop" : 14766, "state" : "GA" }
```

```
{ "_id" : "30310", "city" : "ATLANTA", "loc" : [ -84.423173, 33.727849 ], "pop" : 34017, "state" : "GA" }
```

```

{ "_id" : "30311", "city" : "ATLANTA", "loc" : [ -84.470219, 33.722957 ], "pop" : 34880, "state" :
"GA" }

{ "_id" : "30312", "city" : "ATLANTA", "loc" : [ -84.378125, 33.746749 ], "pop" : 17683, "state" :
"GA" }

{ "_id" : "30313", "city" : "ATLANTA", "loc" : [ -84.39352, 33.76825 ], "pop" : 8038, "state" : "GA" }

{ "_id" : "30314", "city" : "ATLANTA", "loc" : [ -84.425546, 33.756103 ], "pop" : 26649, "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" : "30317", "city" : "ATLANTA", "loc" : [ -84.31685, 33.749788 ], "pop" : 16395, "state" :
"GA" }

{ "_id" : "30318", "city" : "ATLANTA", "loc" : [ -84.445432, 33.786454 ], "pop" : 53894, "state" :
"GA" }

{ "_id" : "30319", "city" : "ATLANTA", "loc" : [ -84.335091, 33.868728 ], "pop" : 32138, "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" : "30329", "city" : "ATLANTA", "loc" : [ -84.321402, 33.823555 ], "pop" : 17013, "state" :
"GA" }

```

```

db.zipcode.aggregate([{$match:{city:"ATLANTA",state:"GA"}}])

```

```

{ "_id" : "30303", "city" : "ATLANTA", "loc" : [ -84.388846, 33.752504 ], "pop" : 1845, "state" :
"GA" }

{ "_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" : "30308", "city" : "ATLANTA", "loc" : [ -84.375744, 33.771839 ], "pop" : 8549, "state" :  
"GA" }  
  
{ "_id" : "30330", "city" : "ATLANTA", "loc" : [ -84.434735, 33.70645 ], "pop" : 643, "state" : "GA" }  
  
{ "_id" : "30331", "city" : "ATLANTA", "loc" : [ -84.520468, 33.72241 ], "pop" : 38185, "state" :  
"GA" }  
  
{ "_id" : "30334", "city" : "ATLANTA", "loc" : [ -84.388188, 33.74715 ], "pop" : 0, "state" : "GA" }  
  
{ "_id" : "30336", "city" : "ATLANTA", "loc" : [ -84.510028, 33.78534 ], "pop" : 1228, "state" : "GA"  
}  
  
{ "_id" : "30339", "city" : "ATLANTA", "loc" : [ -84.462879, 33.87125 ], "pop" : 11158, "state" :  
"GA" }  
  
{ "_id" : "30342", "city" : "ATLANTA", "loc" : [ -84.376091, 33.884245 ], "pop" : 19057, "state" :  
"GA" }  
  
{ "_id" : "30345", "city" : "ATLANTA", "loc" : [ -84.286961, 33.851347 ], "pop" : 19825, "state" :  
"GA" }  
  
{ "_id" : "30346", "city" : "ATLANTA", "loc" : [ -84.333354, 33.926717 ], "pop" : 18, "state" : "GA" }  
  
{ "_id" : "30349", "city" : "ATLANTA", "loc" : [ -84.481258, 33.605331 ], "pop" : 48116, "state" :  
"GA" }  
  
{ "_id" : "30350", "city" : "ATLANTA", "loc" : [ -84.341146, 33.979471 ], "pop" : 24573, "state" :  
"GA" }  
  
{ "_id" : "30360", "city" : "ATLANTA", "loc" : [ -84.271645, 33.937772 ], "pop" : 16023, "state" :  
"GA" }  
  
{ "_id" : "30309", "city" : "ATLANTA", "loc" : [ -84.388338, 33.798407 ], "pop" : 14766, "state" :  
"GA" }  
  
{ "_id" : "30310", "city" : "ATLANTA", "loc" : [ -84.423173, 33.727849 ], "pop" : 34017, "state" :  
"GA" }  
  
{ "_id" : "30311", "city" : "ATLANTA", "loc" : [ -84.470219, 33.722957 ], "pop" : 34880, "state" :  
"GA" }  
  
{ "_id" : "30312", "city" : "ATLANTA", "loc" : [ -84.378125, 33.746749 ], "pop" : 17683, "state" :  
"GA" }  
  
{ "_id" : "30313", "city" : "ATLANTA", "loc" : [ -84.39352, 33.76825 ], "pop" : 8038, "state" : "GA" }  
  
{ "_id" : "30314", "city" : "ATLANTA", "loc" : [ -84.425546, 33.756103 ], "pop" : 26649, "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" : "30317", "city" : "ATLANTA", "loc" : [ -84.31685, 33.749788 ], "pop" : 16395, "state" : "GA" }
{ "_id" : "30318", "city" : "ATLANTA", "loc" : [ -84.445432, 33.786454 ], "pop" : 53894, "state" : "GA" }
{ "_id" : "30319", "city" : "ATLANTA", "loc" : [ -84.335091, 33.868728 ], "pop" : 32138, "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" : "30329", "city" : "ATLANTA", "loc" : [ -84.321402, 33.823555 ], "pop" : 17013, "state" : "GA" }
```

- **Populations By State:-**

```
db.zipcodes.aggregate([{$group:{_id:"$state",Totalpopulation:{$sum:"$pop"}}}])
```

```
{ "_id" : "HI", "Totalpopulation" : 1108229 }
{ "_id" : "WA", "Totalpopulation" : 4866692 }
{ "_id" : "MD", "Totalpopulation" : 4781379 }
{ "_id" : "NV", "Totalpopulation" : 1201833 }
{ "_id" : "OK", "Totalpopulation" : 3145585 }
{ "_id" : "AZ", "Totalpopulation" : 3665228 }
{ "_id" : "CO", "Totalpopulation" : 3293755 }
{ "_id" : "CA", "Totalpopulation" : 29754890 }
{ "_id" : "KY", "Totalpopulation" : 3675484 }
{ "_id" : "MS", "Totalpopulation" : 2573216 }
{ "_id" : "ID", "Totalpopulation" : 1006749 }
{ "_id" : "WV", "Totalpopulation" : 1793146 }
{ "_id" : "IA", "Totalpopulation" : 2776420 }
{ "_id" : "TX", "Totalpopulation" : 16984601 }
{ "_id" : "MI", "Totalpopulation" : 9295297 }
```

{ "_id" : "VA", "Totalpopulation" : 6181479 }
{ "_id" : "OR", "Totalpopulation" : 2842321 }
{ "_id" : "SC", "Totalpopulation" : 3486703 }
{ "_id" : "TN", "Totalpopulation" : 4876457 }
{ "_id" : "MA", "Totalpopulation" : 6016425 }
{ "_id" : "OH", "Totalpopulation" : 10846517 }
{ "_id" : "DC", "Totalpopulation" : 606900 }
{ "_id" : "SD", "Totalpopulation" : 695397 }
{ "_id" : "NC", "Totalpopulation" : 6628637 }
{ "_id" : "LA", "Totalpopulation" : 4217595 }
{ "_id" : "UT", "Totalpopulation" : 1722850 }
{ "_id" : "WI", "Totalpopulation" : 4891769 }
{ "_id" : "PA", "Totalpopulation" : 11881643 }
{ "_id" : "NM", "Totalpopulation" : 1515069 }
{ "_id" : "ND", "Totalpopulation" : 638272 }
{ "_id" : "AK", "Totalpopulation" : 544698 }
{ "_id" : "VT", "Totalpopulation" : 562758 }
{ "_id" : "GA", "Totalpopulation" : 6478216 }
{ "_id" : "RI", "Totalpopulation" : 1003218 }
{ "_id" : "FL", "Totalpopulation" : 12686644 }
{ "_id" : "DE", "Totalpopulation" : 666168 }
{ "_id" : "AL", "Totalpopulation" : 4040587 }
{ "_id" : "NJ", "Totalpopulation" : 7730188 }
{ "_id" : "MT", "Totalpopulation" : 798948 }
{ "_id" : "IL", "Totalpopulation" : 11427576 }
{ "_id" : "KS", "Totalpopulation" : 2475285 }
{ "_id" : "CT", "Totalpopulation" : 3287116 }
{ "_id" : "NE", "Totalpopulation" : 1578139 }
{ "_id" : "NY", "Totalpopulation" : 17990402 }
{ "_id" : "MN", "Totalpopulation" : 4372982 }
{ "_id" : "NH", "Totalpopulation" : 1109252 }

```
{ "_id" : "MO", "Totalpopulation" : 5110648 }
{ "_id" : "AR", "Totalpopulation" : 2350725 }
{ "_id" : "WY", "Totalpopulation" : 453528 }
{ "_id" : "IN", "Totalpopulation" : 5544136 }
{ "_id" : "ME", "Totalpopulation" : 1226648 }
```

```
db.zipcodes.aggregate([{$group:{_id:"$state",Totalpopulation:{$sum:"$pop"}}},{ $sort:{Total
population:-1}}])
```

```
{ "_id" : "CA", "Totalpopulation" : 29754890 }
{ "_id" : "NY", "Totalpopulation" : 17990402 }
{ "_id" : "TX", "Totalpopulation" : 16984601 }
{ "_id" : "FL", "Totalpopulation" : 12686644 }
{ "_id" : "PA", "Totalpopulation" : 11881643 }
{ "_id" : "IL", "Totalpopulation" : 11427576 }
{ "_id" : "OH", "Totalpopulation" : 10846517 }
{ "_id" : "MI", "Totalpopulation" : 9295297 }
{ "_id" : "NJ", "Totalpopulation" : 7730188 }
{ "_id" : "NC", "Totalpopulation" : 6628637 }
{ "_id" : "GA", "Totalpopulation" : 6478216 }
{ "_id" : "VA", "Totalpopulation" : 6181479 }
{ "_id" : "MA", "Totalpopulation" : 6016425 }
{ "_id" : "IN", "Totalpopulation" : 5544136 }
{ "_id" : "MO", "Totalpopulation" : 5110648 }
{ "_id" : "WI", "Totalpopulation" : 4891769 }
{ "_id" : "TN", "Totalpopulation" : 4876457 }
{ "_id" : "WA", "Totalpopulation" : 4866692 }
{ "_id" : "MD", "Totalpopulation" : 4781379 }
{ "_id" : "MN", "Totalpopulation" : 4372982 }
```

Type "it" for more

```
db.zipcodes.aggregate([{$group:{_id:"$state",Totalpopulation:{$sum:"$pop"}}},{ $sort:{Total
population:-1}},{$limit:3}])
```

```
{ "_id" : "CA", "Totalpopulation" : 29754890 }
{ "_id" : "NY", "Totalpopulation" : 17990402 }
{ "_id" : "TX", "Totalpopulation" : 16984601 }
```

- **Populations by City:-**

```
db.zipcodes.aggregate([{$group:{_id:"$city",population:{$sum:"$pop"}}}])
```

```
{ "_id" : "WAMEGO", "population" : 5200 }
{ "_id" : "WALSH", "population" : 2167 }
{ "_id" : "WEST FARMINGTON", "population" : 768 }
{ "_id" : "MELBOURNE", "population" : 64309 }
{ "_id" : "NEW BRITAIN", "population" : 108631 }
{ "_id" : "GRETHEL", "population" : 2126 }
{ "_id" : "JENSEN BEACH", "population" : 13656 }
{ "_id" : "CITRONELLE", "population" : 7233 }
{ "_id" : "GRAPEVIEW", "population" : 3234 }
{ "_id" : "VENEDY", "population" : 539 }
{ "_id" : "MISHAWAKA", "population" : 52942 }
{ "_id" : "ZION", "population" : 26824 }
{ "_id" : "GORDONSVILLE", "population" : 2630 }
{ "_id" : "SAVONBURG", "population" : 197 }
{ "_id" : "LENOX", "population" : 15472 }
{ "_id" : "LEMITAR", "population" : 439 }
{ "_id" : "LUTHERVILLE", "population" : 31560 }
{ "_id" : "LENEXA", "population" : 60981 }
{ "_id" : "ANACORTES", "population" : 12986 }
{ "_id" : "RUSSELL SPRINGS", "population" : 243 }
```

Type "it" for more

```
db.zipcodes.aggregate([{$group:{_id:{city:"$city",state:"$state"},population:{$sum:"$pop"}}},
{$sort:{"population":-1}}])
```

```
{ "_id" : { "city" : "CHICAGO", "state" : "IL" }, "population" : 2452177 }
{ "_id" : { "city" : "BROOKLYN", "state" : "NY" }, "population" : 2300504 }
{ "_id" : { "city" : "LOS ANGELES", "state" : "CA" }, "population" : 2102295 }
{ "_id" : { "city" : "HOUSTON", "state" : "TX" }, "population" : 2095918 }
{ "_id" : { "city" : "PHILADELPHIA", "state" : "PA" }, "population" : 1610956 }
{ "_id" : { "city" : "NEW YORK", "state" : "NY" }, "population" : 1476790 }
{ "_id" : { "city" : "BRONX", "state" : "NY" }, "population" : 1209548 }
{ "_id" : { "city" : "SAN DIEGO", "state" : "CA" }, "population" : 1049298 }
{ "_id" : { "city" : "DETROIT", "state" : "MI" }, "population" : 963243 }
{ "_id" : { "city" : "DALLAS", "state" : "TX" }, "population" : 940191 }
{ "_id" : { "city" : "PHOENIX", "state" : "AZ" }, "population" : 890853 }
{ "_id" : { "city" : "MIAMI", "state" : "FL" }, "population" : 825232 }
{ "_id" : { "city" : "SAN JOSE", "state" : "CA" }, "population" : 816653 }
{ "_id" : { "city" : "SAN ANTONIO", "state" : "TX" }, "population" : 811792 }
{ "_id" : { "city" : "BALTIMORE", "state" : "MD" }, "population" : 733081 }
{ "_id" : { "city" : "SAN FRANCISCO", "state" : "CA" }, "population" : 723993 }
{ "_id" : { "city" : "MEMPHIS", "state" : "TN" }, "population" : 632837 }
{ "_id" : { "city" : "SACRAMENTO", "state" : "CA" }, "population" : 628279 }
{ "_id" : { "city" : "JACKSONVILLE", "state" : "FL" }, "population" : 610160 }
{ "_id" : { "city" : "ATLANTA", "state" : "GA" }, "population" : 609591 }
```

Type "it" for more

```
db.zipcodes.aggregate([{$group: {_id: {city: "$city", state: "$state"}, population: {$sum: "$pop"}}},
{$sort: {"population": -1}}, {$limit: 3}])
```

```
{ "_id" : { "city" : "CHICAGO", "state" : "IL" }, "population" : 2452177 }
{ "_id" : { "city" : "BROOKLYN", "state" : "NY" }, "population" : 2300504 }
{ "_id" : { "city" : "LOS ANGELES", "state" : "CA" }, "population" : 2102295 }
```

- **Bonus:-**

```
db.zipcodes.aggregate([{$group: {_id: "$city", AvgPopulation: {$avg: "$pop"}}}])
```

```
{ "_id" : "KENNEBEC", "AvgPopulation" : 495 }
{ "_id" : "ROSSITER", "AvgPopulation" : 1858 }
{ "_id" : "SOLVAY", "AvgPopulation" : 13467 }
{ "_id" : "ELLENDAL", "AvgPopulation" : 1980.6666666666667 }
{ "_id" : "MC ALISTERVILLE", "AvgPopulation" : 3073 }
{ "_id" : "WILMONT", "AvgPopulation" : 1101 }
{ "_id" : "PETTIBONE", "AvgPopulation" : 163 }
{ "_id" : "BELDEN", "AvgPopulation" : 1882.5 }
{ "_id" : "WIERGATE", "AvgPopulation" : 290 }
{ "_id" : "CHILOQUIN", "AvgPopulation" : 3608 }
{ "_id" : "NORTH GRANVILLE", "AvgPopulation" : 185 }
{ "_id" : "DOWNEY", "AvgPopulation" : 23137 }
{ "_id" : "CUTTYHUNK", "AvgPopulation" : 98 }
{ "_id" : "VALLONIA", "AvgPopulation" : 1338 }
{ "_id" : "RUSH CITY", "AvgPopulation" : 3566 }
{ "_id" : "HOLLIS CENTER", "AvgPopulation" : 2243 }
{ "_id" : "WEST LYNN", "AvgPopulation" : 21360 }
{ "_id" : "MAPLECREST", "AvgPopulation" : 342 }
{ "_id" : "PETAL", "AvgPopulation" : 15799 }
{ "_id" : "GARFIELD HEIGHTS", "AvgPopulation" : 31020 }
```

Type "it" for more

```
db.zipcodes.aggregate([{$group: {_id: "$city", AvgPopulation: {$avg: "$pop"}}}, {$sort: {AvgPopulation: -1}}, {$limit: 3}])
```

```
{ "_id" : "BELL GARDENS", "AvgPopulation" : 99568 }
{ "_id" : "ARLETA", "AvgPopulation" : 88114 }
{ "_id" : "SOUTH GATE", "AvgPopulation" : 87026 }
```