```
> use population
switched to db population
> show collections
zipcodes
> db.zipcodes. 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" }
Type "it" for more
> db.zipcodes.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" : "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" }
Type "it" for more
> db.zipcodes.aggregate( [ { $match : {city:"ATLANTA"}} , { $group : {_id: "$city"}} ])
{ "_id" : "ATLANTA" }
> db.zipcodes.aggregate( [ { $match : {city:"ATLANTA"}} , { $group : {_id: {city: "$city" , state:
"$state"}}} ])
{ "_id" : { "city" : "ATLANTA", "state" : "IL" } }
{ "_id" : { "city" : "ATLANTA", "state" : "TX" } }
{ "_id" : { "city" : "ATLANTA", "state" : "IN" } }
{ "_id" : { "city" : "ATLANTA", "state" : "LA" } }
{ "_id" : { "city" : "ATLANTA", "state" : "MO" } }
{ "_id" : { "city" : "ATLANTA", "state" : "NE" } }
```

```
{ "_id" : { "city" : "ATLANTA", "state" : "NY" } }
{ "_id" : { "city" : "ATLANTA", "state" : "GA" } }
{ "_id" : { "city" : "ATLANTA", "state" : "ID" } }
{ "_id" : { "city" : "ATLANTA", "state" : "KS" } }
{ "_id" : { "city" : "ATLANTA", "state" : "MI" } }
> db.zipcodes.aggregate( [ { $match : {city:"ATLANTA"}} , { $group : {_id: {city: "$city" , state:
"$state"}}}, {$count:"city"}])
{ "city" : 11 }
> db.zipcodes.aggregate( [ { $match : {city:"ATLANTA"}} , { $group : {_id:"$city" , Count :{$sum:
"$pop"}}}])
{ "_id" : "ATLANTA", "Count" : 630046 }
Populations By State
> db.zipcodes.aggregate([{$match: {}}, {$group: {_id: "$state", population: {$sum: "$pop"}}}])
{ "_id" : "UT", "population" : 1722850 }
{ "_id" : "WV", "population" : 1793146 }
{ "_id" : "MS", "population" : 2573216 }
{ "_id" : "TX", "population" : 16984601 }
{ "_id" : "MA", "population" : 6016425 }
{ "_id" : "TN", "population" : 4876457 }
{ "_id" : "DE", "population" : 666168 }
{ "_id" : "ID", "population" : 1006749 }
{ "_id" : "SC", "population" : 3486703 }
{ "_id" : "OH", "population" : 10846517 }
{ "_id" : "IA", "population" : 2776420 }
{ "_id" : "MI", "population" : 9295297 }
{ "_id" : "PA", "population" : 11881643 }
{ "_id" : "IL", "population" : 11427576 }
{ "_id" : "RI", "population" : 1003218 }
{ "_id" : "FL", "population" : 12686644 }
{ "_id" : "LA", "population" : 4217595 }
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{ "_id" : "AR", "population" : 2350725 }
{ "_id" : "NC", "population" : 6628637 }
{ "_id" : "GA", "population" : 6478216 }
Type "it" for more
> db.zipcodes.aggregate([{$match: {}}, {$group: {_id: "$state", population: {$sum: "$pop"}}}, {$sort:
{population : -1}} ])
{ "_id" : "CA", "population" : 29754890 }
{ "_id" : "NY", "population" : 17990402 }
{ "_id" : "TX", "population" : 16984601 }
{ "_id" : "FL", "population" : 12686644 }
{ "_id" : "PA", "population" : 11881643 }
{ "_id" : "IL", "population" : 11427576 }
{ "_id" : "OH", "population" : 10846517 }
{ "_id" : "MI", "population" : 9295297 }
{ "_id" : "NJ", "population" : 7730188 }
{ "_id" : "NC", "population" : 6628637 }
{ "_id" : "GA", "population" : 6478216 }
{ "_id" : "VA", "population" : 6181479 }
{ "_id" : "MA", "population" : 6016425 }
{ "_id" : "IN", "population" : 5544136 }
{ "_id" : "MO", "population" : 5110648 }
{ "_id" : "WI", "population" : 4891769 }
{ "_id" : "TN", "population" : 4876457 }
{ "_id" : "WA", "population" : 4866692 }
{ "_id" : "MD", "population" : 4781379 }
{ "_id" : "MN", "population" : 4372982 }
Type "it" for more
> db.zipcodes.aggregate([{$match: {}}, {$group: {_id: "$state", population: {$sum: "$pop"}}}, {$sort:
{population : -1}}, {$limit: 3} ])
{ "_id" : "CA", "population" : 29754890 }
```

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{ "_id" : "NY", "population" : 17990402 }
{ "_id" : "TX", "population" : 16984601 }
Populations by City
> db.zipcodes.aggregate([{$group : {_id: [{ City : "$city", State : "$state"}], Total_pop: {$sum :
"$pop"}}}])
{ "_id" : [ { "City" : "BROOKESMITH", "State" : "TX" } ], "Total_pop" : 240 }
{ "_id" : [ { "City" : "HENDERSON", "State" : "CO" } ], "Total_pop" : 1388 }
{ "_id" : [ { "City" : "GUYMON", "State" : "OK" } ], "Total_pop" : 9387 }
{ "_id" : [ { "City" : "NORTH LAWRENCE", "State" : "OH" } ], "Total_pop" : 2528 }
{ "_id" : [ { "City" : "ANGORA", "State" : "MN" } ], "Total_pop" : 291 }
{ "_id" : [ { "City" : "PRESCOTT", "State" : "IA" } ], "Total_pop" : 205 }
{ "_id" : [ { "City" : "MELVIN", "State" : "IL" } ], "Total_pop" : 654 }
{ "_id" : [ { "City" : "GERING", "State" : "NE" } ], "Total_pop" : 11631 }
{ "_id" : [ { "City" : "WILLIAMSTOWN", "State" : "MO" } ], "Total_pop" : 343 }
{ "_id" : [ { "City" : "AGNEW", "State" : "NE" } ], "Total_pop" : 1218 }
{ "_id" : [ { "City" : "NORWOOD", "State" : "LA" } ], "Total_pop" : 1833 }
{ "_id" : [ { "City" : "CARSWELL AFB", "State" : "TX" } ], "Total_pop" : 940 }
{ "_id" : [ { "City" : "SAINT BERNARD", "State" : "OH" } ], "Total_pop" : 8838 }
{ "_id" : [ { "City" : "SEGNO", "State" : "TX" } ], "Total_pop" : 24261 }
{ "_id" : [ { "City" : "PARIS", "State" : "TN" } ], "Total_pop" : 16597 }
{ "_id" : [ { "City" : "SOUTH ELGIN", "State" : "IL" } ], "Total_pop" : 9117 }
{ "_id" : [ { "City" : "SAND SPRINGS", "State" : "OK" } ], "Total_pop" : 25745 }
{ "_id" : [ { "City" : "MANCHESTER", "State" : "MN" } ], "Total_pop" : 552 }
{ "_id" : [ { "City" : "ROUGEMONT", "State" : "NC" } ], "Total_pop" : 4253 }
{ "_id" : [ { "City" : "ALBANY", "State" : "OH" } ], "Total_pop" : 4090 }
Type "it" for more
> db.zipcodes.aggregate([{$sort : {population : -1}},{$group : {_id: [{ City : "$city", State : "$state"}],
Total_pop: {$sum : "$pop"}}}])
{ "_id" : [ { "City" : "MERETA", "State" : "TX" } ], "Total_pop" : 768 }
```

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{ "_id" : [ { "City" : "GALLIPOLIS", "State" : "OH" } ], "Total_pop" : 18163 }
{ "_id" : [ { "City" : "BRECKENRIDGE", "State" : "TX" } ], "Total_pop" : 8803 }
{ "_id" : [ { "City" : "CENTRAL CITY", "State" : "IA" } ], "Total_pop" : 3478 }
{ "_id" : [ { "City" : "ECKELSON", "State" : "ND" } ], "Total_pop" : 138 }
{ "_id" : [ { "City" : "NEW BRUNSWICK", "State" : "NJ" } ], "Total_pop" : 41710 }
{ "_id" : [ { "City" : "FRIENDLY", "State" : "WV" } ], "Total_pop" : 1073 }
{ "_id" : [ { "City" : "HARWOOD", "State" : "MD" } ], "Total_pop" : 3765 }
{ "_id" : [ { "City" : "STEDMAN", "State" : "NC" } ], "Total_pop" : 4776 }
{ "_id" : [ { "City" : "HERMON", "State" : "NY" } ], "Total_pop" : 1636 }
{ "_id" : [ { "City" : "TECUMSEH", "State" : "MI" } ], "Total_pop" : 12645 }
{ "_id" : [ { "City" : "LONG PINE", "State" : "NE" } ], "Total_pop" : 706 }
{ "_id" : [ { "City" : "ROGERS", "State" : "AR" } ], "Total_pop" : 34081 }
{ "_id" : [ { "City" : "MONTEVIEW", "State" : "ID" } ], "Total_pop" : 441 }
{ "_id" : [ { "City" : "LANCASTER", "State" : "MO" } ], "Total_pop" : 1060 }
{ "_id" : [ { "City" : "THOMAS", "State" : "OK" } ], "Total_pop" : 1774 }
{ "_id" : [ { "City" : "HONEY GROVE", "State" : "TX" } ], "Total_pop" : 2563 }
{ "_id" : [ { "City" : "SWANTON", "State" : "OH" } ], "Total_pop" : 10729 }
{ "\_id" : [ { "City" : "DEXTER", "State" : "MO" } ], "Total\_pop" : 11641 } 
{ "_id" : [ { "City" : "BELPRE", "State" : "KS" } ], "Total_pop" : 268 }
Type "it" for more
> db.zipcodes.aggregate([{$sort : {population : -1}},{$group : {_id: [{ City : "$city", State : "$state"}],
Total_pop: {$sum : "$pop"}}},{$limit : 3}])
{ "_id" : [ { "City" : "SHADOW HILLS", "State" : "CA" } ], "Total_pop" : 18303 }
{ "_id" : [ { "City" : "MANHATTAN", "State" : "KS" } ], "Total_pop" : 50178 }
{ "_id" : [ { "City" : "GEYSERVILLE", "State" : "CA" } ], "Total_pop" : 2716 }
> db.zipcodes.aggregate([\{\$match: \{state: "TX"\}\}, \{\$sort: \{population: -1\}\}, \{\$group: \{\_id: [\{\ City: \{population: -1\}\}, \{\$group: -1\}\}, \{\$group: \{population: -1\}\}, \{\$group: -1\}\}, \{\$group: -1\}\}, \{\$group: -1\}\}, \{\$group: -1\}\}, \{\$group: -1\}\}, \{\$group: -1\}\}
"$city", State : "$state"}], Total_pop: {$sum : "$pop"}}},{$limit : 3}])
{ "_id" : [ { "City" : "BEEVILLE", "State" : "TX" } ], "Total_pop" : 23211 }
{ "_id" : [ { "City" : "HARLINGEN", "State" : "TX" } ], "Total_pop" : 64964 }
{ "_id" : [ { "City" : "DUMONT", "State" : "TX" } ], "Total_pop" : 344 }
```