```
> // $sort
>
> // sort "states" alphabetically in ascending order and count number of "cities"
> db.ZipCode.aggregate([ {$group: {_id: "$state", Count: {$sum: 1}}}, {$sort: {_id: 1}}, {$limit: 5} ])
{ "_id" : "AK", "Count" : 195 }
{ "_id" : "AL", "Count" : 567 }
{ "_id" : "AR", "Count" : 578 }
{ "_id" : "AZ", "Count" : 270 }
{ "_id" : "CA", "Count" : 1516 }
>
> // sort "states" alphabetically in descending order and count number of "cities"
> db.ZipCode.aggregate([ {$group: {_id: "$state", Count: {$sum: 1}}}, {$sort: {_id: -1}}, {$limit: 5} ])
{ "_id" : "WY", "Count" : 140 }
{ "_id" : "WV", "Count" : 656 }
{ "_id" : "WI", "Count" : 716 }
{ "_id" : "WA", "Count" : 484 }
{ "_id" : "VT", "Count" : 243 }
>
> // count number of "cities" in a "state" by group and sort in ascending order
> db.ZipCode.aggregate([ {$group: {_id: "$state", Count: {$sum: 1}}}, {$sort: {Count: 1}}, {$limit: 5} ])
{ "_id" : "DC", "Count" : 24 }
{ "_id" : "DE", "Count" : 53 }
{ "_id" : "RI", "Count" : 69 }
{ "_id" : "HI", "Count" : 80 }
{ "_id" : "NV", "Count" : 104 }
>
> // count number of "cities" in a "state" by group and sort in descending order
> db.ZipCode.aggregate([ {$group: {_id: "$state", Count: {$sum: 1}}}, {$sort: {Count: -1}}, {$limit: 5} ])
{ "_id" : "TX", "Count" : 1671 }
{ "_id" : "NY", "Count" : 1595 }
{ "_id" : "CA", "Count" : 1516 }
{ "_id" : "PA", "Count" : 1458 }
{ "_id" : "IL", "Count" : 1237 }
>
> // sort "cities" by population for each "state" in ascending order and returns the smallest "cities" by population for each "state"
> db.ZipCode.aggregate([ {$group: {_id: {State: "$state", City: "$city"}, Population: {$sum: "$pop"}}}, {$sort: {Population: 1}}, {$limit: 5} ])
{ "_id" : { "State" : "NM", "City" : "ALGODONES" }, "Population" : 0 }
{ "_id" : { "State" : "KS", "City" : "ARNOLD" }, "Population" : 0 }
{ "_id" : { "State" : "VA", "City" : "WALLOPS ISLAND" }, "Population" : 0 }
{ "_id" : { "State" : "NM", "City" : "KIRTLAND A F B E" }, "Population" : 0 }
{ "_id" : { "State" : "CA", "City" : "TWIN BRIDGES" }, "Population" : 0 }
>
> // sort "cities" by population for each "state" in descending order and returns the largest "cities" by population for each "state"
> db.ZipCode.aggregate([ {$group: {_id: {State: "$state", City: "$city"}, Population: {$sum: "$pop"}}}, {$sort: {Population: -1}}, {$limit: 5} ])
{ "_id" : { "State" : "IL", "City" : "CHICAGO" }, "Population" : 2452177 }
{ "_id" : { "State" : "NY", "City" : "BROOKLYN" }, "Population" : 2300504 }
{ "_id" : { "State" : "CA", "City" : "LOS ANGELES" }, "Population" : 2102295 }
{ "_id" : { "State" : "TX", "City" : "HOUSTON" }, "Population" : 2095918 }
{ "_id" : { "State" : "PA", "City" : "PHILADELPHIA" }, "Population" : 1610956 }
>
> // sort "cities" by population of state: "TX" and return the "city" with maximum population
> db.ZipCode.aggregate([ {$group: {_id: {State: "$state", City: "$city"}, Population: {$sum: "$pop"}}}, {$match: {"_id.State": "TX"}}, {$sort: {Population: -1}}, {$limit: 1} ])
{ "_id" : { "State" : "TX", "City" : "HOUSTON" }, "Population" : 2095918 }
>
```