

Q1. Find all the zip codes in Iowa state.

```
db.zips.aggregate([
  {$match:{state:"IA"}},
  {$group:{
    id:{state:"$state"},
    zipcodes: {$addToSet: "$_id"}
  }
}]);
```

Q2. Find all the zip codes with a population less than 1000.

```
db.zips.aggregate([
  {$match:{pop: {$lt:1000}}},
  {$group:{_id:{state:"$state"},
    zipcodes: {$addToSet: "$_id"}
  }
}]);
```

Q3. Find all cities that have more than one zip code, sort the results based by state and city name.

```
db.zips.aggregate([
  {$group:{_id:{city:"$city",state:"$state"},
    num_zip:{$sum:1}}},
  {$match:{num_zip:{$gt:1}}},
  {$sort:{"_id.state":1,"_id.city":1}}
]);
```

Q4. Display the least populated city in each state

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