

Respuestas práctica

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Pregunta 1

```
db.usage.find({track: {$exists: 1}}).limit(3).pretty()
```

Pregunta 2

```
db.usage.aggregate(  
  {$match: {"track": {$exists: 1}}},  
  {$project: {tracks: {$size: "$track.features"}}}  
)
```

Pregunta 3

```
db.usage.aggregate(  
  {$match: {"track": {$exists: 1}}},  
  {$replaceRoot: {newRoot: "$track"}},  
  {$unwind: "$features"},  
  {$project: {type: "$features.geometry.type"}},  
  {$group: {_id: "$type", num: {$sum: 1}}}  
)
```

Pregunta 4

```
db.usage.aggregate(  
  {$match: {idunplug_station: 14}},  
  {$group:  
    {_id: "$idunplug_base",  
     tiempo_max: {$max: "$travel_time"},  
     tiempo_min: {$min: "$travel_time"},  
     tiempo_avg: {$avg: "$travel_time"}  
    }  
  }  
)
```

Pregunta 5

```
db.usage.aggregate(  
  {$group: {_id: {$dayOfMonth: "$unplug_hourTime"},  
            travel_time_avg: {$avg: "$travel_time"}  
          }  
  })
```

```

    },
    {$sort: {_id: 1}}
)

```

Pregunta 6

```

db.stations.aggregate(
  {$limit: 1},
  {$unwind: "$stations"},
  {$match: {"stations.address": {$regex: /Calle Segovia/}}}
).pretty()

```

Pregunta 7

```

db.stations.aggregate(
  {$limit: 1},
  {$project: {_id: {$dateFromString: {dateString: "$_id"}}}}
)

```

Pregunta 8

```

db.stations.aggregate(
  {$addFields: {
    day: {$dayOfMonth: {$dateFromString: {dateString: "$_id"}}}},
    month: {$month: {$dateFromString: {dateString: "$_id"}}}},
  },
  {$match: {day: 8, month: 12}},
  {$unwind: "$stations"},
  {$group: {_id: "$stations.free_bases", stations: {$push: "$stations.id"}}},
  {$sort: {_id: -1}},
  {$limit: 1}
)

```

Pregunta 9

```

db.usage.aggregate(
  {$group: {
    _id: {idunplug_base: "$idunplug_base", idplug_base: "$idplug_base"},
    avg_travel_time: {$avg: "$travel_time"}
  }
}
)

```

Pregunta 10

```

db.stations.aggregate(

```

```

{$unwind: "$stations"},
{$group:
  {
    _id: "$stations.id",
    states: {$push:
      {
        timestamp: {$dateFromString: {dateString: "$_id"}},
        free_bases: "$stations.free_bases"
      }
    }
  }
},
{$out: "stations2"}
)
db.stations2.aggregate({$project: {_id:1, states: {$slice: ["$states", 3]}}}, {$limit: 2}).pretty()

```