

1. How many documents in the sample_training.zips collection have fewer than 1000 people listed in the pop field?
2. What is the difference between the number of people born in 1998 and the number of people born after 1998 in the sample_training.trips collection?
3. Using the sample_training.routes collection return all routes that have at least one stop in them?
4. How many businesses in the sample_training.inspections dataset have the inspection result "Out of Business" and belong to the "Home Improvement Contractor - 100" sector?
5. Write a query to return all documents from the sample_training.inspections collection where the inspection date is either "Feb 20 2015", or "Feb 21 2015" and the company is not part of the "Cigarette Retail Dealer - 127" sector.
6. Before solving this exercise, make sure to undo some of the changes that we made to the zips collection earlier in the course by running the following command:

```
db.zips.updateMany({ "city": "HUDSON" }, { "$inc": { "pop": -10 } })
```

How many zips in the sample_training.zips dataset are neither over-populated nor under-populated?

In this case, we consider population of more than 1,000,000 to be over- populated and less than 5,000 to be under-populated.

7. How many companies in the sample_training.companies dataset were either founded in 2004 and either have the social category_code or web category_code, or were founded in the month of October and also either have the social category_code or web category_code?