

1.

```
{
  "_id": OBJECTID,
  "text": STRING,
  "title": STRING,
  "num_chars": INTEGER,
  "date": DATE,
  "category": STRING,
  "terms": [
    {
      "term": STRING,
      "term_count": INTEGER
    }
  ]
}
```

2.

a) db.documents.countDocuments();

b) db.documents.find({ category: "Sports" }, {projection: { text: 1 }})

c) db.documents.aggregate([
 { \$unwind: "\$terms" },
 { \$group: { _id: "\$terms.term", count: { \$sum: 1 } } },
 { \$project: { _id: 0, term: "\$_id" } }
])

d) db.documents.aggregate([
 { \$match: { title: "Arizona" } },
 { \$unwind: "\$terms" },
 { \$group: { _id: null, count: { \$sum: "\$terms.term_count" } } }
])

e) db.documents.aggregate([
 { \$match: { category: "Seasons" } },
 { \$unwind: "\$terms" },
 { \$group: { _id: null, count: { \$sum: "\$terms.term_count" } } }
])

f) db.documents.aggregate([
 { \$unwind: "\$terms" },
 { \$match: { term: "months" } },
 { \$group: { _id: null, count: { \$sum: "\$terms.term_count" } } }
])

g) db.documents.aggregate([
 { \$unwind: "\$terms" },
 { \$group: { _id: "\$_id", count: { \$sum: "\$terms.term_count" } } },
 { \$sort: { count: -1 } },
 { \$limit: 1 }
])

h) db.documents.aggregate([
 { \$unwind: "\$terms" },
 { \$group: { _id: "\$terms.term", count: { \$sum: "\$terms.term_count" } } },
 { \$sort: { count: -1 } },
 { \$limit: 1 }
])

3.

[nicholas-a-karle/WSRHW3 \(github.com\)](https://github.com/nicholas-a-karle/WSRHW3)