1. Start Mongo Shell

```
[root@localhost tom]# mongo
```

```
MongoDB shell version: 2.6.3
connecting to: test
mongos>
```

2. List Existing Databases

```
mongos> show dbs
```

```
admin    (empty)
books    0.063GB
config   0.016GB
```

3. Chose a Database

```
mongos> use books
```

```
switched to db books
```

4. Create a collection with few documents

```
mongos>
for(i=0;i<=10;i++){db.mybooks.insert({_id:i,name:"book_number_"+i,author:"
author"})}
```

```
WriteResult({ "nInserted" : 1 })
```

5. Check the documents

```
mongos> db.mybooks.find()
```

```
{ "_id" : 0, "name" : "book_number_0", "author" : "author" }
{ "_id" : 1, "name" : "book_number_1", "author" : "author" }
{ "_id" : 2, "name" : "book_number_2", "author" : "author" }
{ "_id" : 3, "name" : "book_number_3", "author" : "author" }
{ "_id" : 4, "name" : "book_number_4", "author" : "author" }
{ "_id" : 5, "name" : "book_number_5", "author" : "author" }
{ "_id" : 6, "name" : "book_number_6", "author" : "author" }
{ "_id" : 7, "name" : "book_number_7", "author" : "author" }
{ "_id" : 8, "name" : "book_number_8", "author" : "author" }
{ "_id" : 9, "name" : "book_number_9", "author" : "author" }
{ "_id" : 10, "name" : "book_number_10", "author" : "author" }
```

6. List all Collections

```
mongos> show collections
```

```
books
mybooks
system.indexes
```

7. Enable Sharding for the database

```
mongos> sh.enableSharding("books")
```

```
{ "ok" : 1 }
```

8. Shard the Newly Created Collection

```
mongos> sh.shardCollection("books.mybooks",{_id:1},true)
```

```
{ "collectionsharded" : "books.mybooks", "ok" : 1 }
```

9. Check Sharding Status

```
mongos> sh.status()
```

```
--- Sharding Status ---
  sharding version: {
      "_id" : 1,
      "version" : 4,
      "minCompatibleVersion" : 4,
      "currentVersion" : 5,
      "clusterId" : ObjectId("53bdcc24ecb20b84c96f5914")
}
  shards:
      {  "_id" : "ReplicaSetNew1",  "host" :
"ReplicaSetNew1/localhost.localdomain:27011,localhost.localdomain:27012,lo
calhost.localdomain:27013" }
      {  "_id" : "ReplicaSetNew2",  "host" :
"ReplicaSetNew2/localhost.localdomain:27021,localhost.localdomain:27022,lo
calhost.localdomain:27023" }
      {  "_id" : "ReplicaSetNew3",  "host" :
"ReplicaSetNew3/localhost.localdomain:27031,localhost.localdomain:27032,lo
calhost.localdomain:27033" }
```

10.   Insert Few More Documents

```
mongos>
for(i=11;i<=50000;i++){db.mybooks.insert({_id:i,name:"book_number_"+i,auth
or:"author",description:"this is a book"})}
```

```
WriteResult({ "nInserted" : 1 })
```

11.   Check Status

```
mongos> db.mybooks.stats()
```

```
{
     "sharded" : true,
     "systemFlags" : 1,
     "userFlags" : 1,
     "ns" : "books.mybooks",
     "count" : 50001,
     "numExtents" : 12,
     "size" : 5084336,
     "storageSize" : 13983744,
     "totalIndexSize" : 1422624,
     "indexSizes" : {
          "_id_" : 1422624
     },
     "avgObjSize" : 101.68468630627387,
     "nindexes" : 1,
     "nchunks" : 4,
     "shards" : {
          "ReplicaSetNew1" : {
               "ns" : "books.mybooks",
               "count" : 9613,
               "size" : 560880,
               "avgObjSize" : 58,
               "storageSize" : 2793472,
               "numExtents" : 5,
               "nindexes" : 1,
               "lastExtentSize" : 2097152,
               "paddingFactor" : 1,
               "systemFlags" : 1,
               "userFlags" : 1,
               "totalIndexSize" : 277984,
               "indexSizes" : {
                    "_id_" : 277984
               },
               "ok" : 1
          },
          "ReplicaSetNew2" : {
               "ns" : "books.mybooks",
               "count" : 0,
               "size" : 0,
               "storageSize" : 8192,
               "numExtents" : 1,
               "nindexes" : 1,
               "lastExtentSize" : 8192,
               "paddingFactor" : 1,
               "systemFlags" : 1,
               "userFlags" : 1,
               "totalIndexSize" : 8176,
               "indexSizes" : {
                    "_id_" : 8176
```

```
                },
                "ok" : 1
        },
        "ReplicaSetNew3" : {
                "ns" : "books.mybooks",
                "count" : 40388,
                "size" : 4523456,
                "avgObjSize" : 112,
                "storageSize" : 11182080,
                "numExtents" : 6,
                "nindexes" : 1,
                "lastExtentSize" : 8388608,
                "paddingFactor" : 1,
                "systemFlags" : 1,
                "userFlags" : 1,
                "totalIndexSize" : 1136464,
                "indexSizes" : {
                        "_id_" : 1136464
                },
                "ok" : 1
        }
    },
    "ok" : 1
}
```