Chapter 3: Index Operations

Lab 3.1: Explain Output

Problem:

In this lab you're going to determine which index was used to satisfy a query given its explain output.

The following query was ran:

```
> var exp = db.restaurants.explain("executionStats")
> exp.find({ "address.state": "NY", stars: { $gt: 3, $lt: 4 }
}).sort({ name: 1 }).hint(REDACTED)
```

Which resulted in the following output:

```
{
  "queryPlanner": {
    "plannerVersion": 1,
    "namespace": "m201.restaurants",
    "indexFilterSet": false,
    "parsedQuery": "REDACTED",
    "winningPlan": {
      "stage": "SORT",
      "sortPattern": {
        "name": 1
      },
      "inputStage": {
        "stage": "SORT_KEY_GENERATOR",
        "inputStage": {
          "stage": "FETCH",
          "inputStage": {
            "stage": "IXSCAN",
            "keyPattern": "REDACTED",
            "indexName": "REDACTED",
            "isMultiKey": false,
```

```
        "isUnique": false,
        "isSparse": false,
        "isPartial": false,
        "indexVersion": 1,
        "direction": "forward",
        "indexBounds": "REDACTED"
      }
    }
  }
},
"rejectedPlans": [ ]
},
"executionStats": {
```

Correct! SEE DETAILED ANSWER   ✕

```
    "nReturned": 3335,
    "executionTimeMillis": 20,
    "totalKeysExamined": 3335,
    "totalDocsExamined": 3335,
    "executionStages": "REDACTED"
  },
  "serverInfo": "REDACTED",
  "ok": 1
}
```

Given the redacted explain output above, select the index that was passed to hint.

Note: The `hint()` method is used to force the query planner to select a particular index for a given query. You can learn more about hint by visiting its documentation.

Attempts Remaining: Correct Answer ✓ ◯ ◯

Choose the best answer:

◯ { "address.state": 1, "name": 1 }

◯ { "address.state": 1 }

◉ { "address.state": 1, "stars": 1, "name": 1 }

◯ { "address.state": 1, "name": 1, "stars": 1 }

Correct!	See detailed answer