Part 2.a: Display all students.

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.find()
                                                                         id: ObjectId('67abf1478c4fafea1dcb0ceb'),
                                                                                                                   lastName: 'Chang',
                                                                        firstName: 'Hannah',
                                                                                                                   studentId: 's1015',
                                                                        lastName: 'Abbott',
    id: ObjectId('67abf1468c4fafea1dcb0ce6'),
                                                                                                                   houseId: 'h1009'
                                                                        studentId: 's1012',
                                                                        houseId: 'h1008'
    firstName: 'Albus',
                                                                                                                   lastName: 'Chang',
    lastName: 'Dumbledore',
                                                                                                                   studentId: 's1015',
    studentId: 's1007',
                                                                                                                   lastName: 'Chang',
                                                                         id: ObjectId('67abf1478c4fafea1dcb0cec'),
    houseId: 'h1007'
                                                                        firstName: 'Luna',
                                                                                                                   lastName: 'Chang',
                                                                        lastName: 'Lovegood',
                                                                                                                   studentId: 's1015',
                                                                        studentId: 's1013',
                                                                                                                   houseTd: 'h1009'
                                                                        houseId: 'h1009'
    id: ObjectId('67abf1468c4fafea1dcb0ce7'),
    firstName: 'Minerva',
    lastName: 'McGonagall',
                                                                         id: ObjectId('67abf1478c4fafea1dcb0ced'),
                                                                                                                    id: ObjectId('67abf1478c4fafea1dcb0cef'),
    studentId: 's1008',
                                                                        firstName: 'Sybill',
                                                                                                                   firstName: 'Lucius',
    houseId: 'h1007'
                                                                        lastName: 'Trelawney',
                                                                                                                   lastName: 'Malfoy',
                                                                        studentId: 's1014',
                                                                        houseId: 'h1009'
                                                                                                                   studentId: 's1016'.
                                                                                                                   houseId: 'h1010'
    id: ObjectId('67abf1468c4fafea1dcb0ce8'),
    firstName: 'Hagrid',
                                                                         _id: ObjectId('67abf1478c4fafea1dcb0cee'),
    lastName: 'Rubeus',
                                                                        firstName: 'Cho',
    studentId: 's1009',
                                                                        lastName: 'Chang',
                                                                                                                   id: ObjectId('67abf1478c4fafea1dcb0cf0'),
    houseId: 'h1007'
                                                                        lastName: 'Chang',
                                                                                                                   firstName: 'Albus',
                                                                        lastName: 'Chang',
                                                                                                                   lastName: 'Potter',
                                                                        studentId: 's1015',
                                                                                                                   studentId: 's1017',
                                                                        houseId: 'h1009'
    id: ObjectId('67abf1468c4fafea1dcb0ce9'),
                                                                                                                   houseId: 'h1010'
    firstName: 'Bridget',
    lastName: 'Wenlock',
                                                                         id: ObjectId('67abf1478c4fafea1dcb0cef'),
                                                                        firstName: 'Lucius',
    studentId: 's1010',
                                                                        lastName: 'Malfoy',
                                                                                                                    id: ObjectId('67abf1478c4fafea1dcb0cf1'),
    houseId: 'h1008'
                                                                        studentId: 's1016',
                                                                                                                   firstName: 'Bellatrix',
                                                                        lastName: 'Chang',
                                                                                                                   lastName: 'Lestrange',
                                                                        lastName: 'Chang',
                                                                                                                   studentId: 's1018',
    id: ObjectId('67abf1468c4fafea1dcb0cea'),
                                                                        lastName: 'Chang',
                                                                                                                   houseId: 'h1010'
    firstName: 'Cedric',
                                                                        studentId: 's1015',
                                                                        houseId: 'h1009'
    lastName: 'Diggory',
                                                                        lastName: 'Chang',
    studentId: 's1011',
                                                                        studentId: 's1015',
    houseId: 'h1008'
                                                                                                                 :las atlas-dy3k5g-shard-0 [primary] web335DB>
                                                                        houseId: 'h1009'
  },
```

ASSIGNMENT 6.2 - AGGREGATE QUERIES

Part 2.b: Add a new student and prove student was added

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.insertOne({firstName: "John", lastName: "Doe", studentId: "s1019", houseId: "h1007"}) {
    acknowledged: true,
    insertedId: ObjectId('67ac02a88c4fafea1dcb0cf2')
}
```

Part 2.b Proof:

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.findOne({studentId: "s1019"});

{
    _id: ObjectId('67ac02a88c4fafea1dcb0cf2'),
    firstName: 'John',
    lastName: 'Doe',
    studentId: 's1019',
    houseId: 'h1007'
}
Atlas atlas-dy3k5g-shard-0 [primary] web335DB>
```

Part 2.c: Update the newly added student's last name

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.updateOne({studentId: "s1019"}, {$set: {lastName: "Smith"}})
{
   acknowledged: true,
   insertedId: null,
   matchedCount: 1,
   modifiedCount: 1,
   upsertedCount: 0
}
```

Part 2.c proof:

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.findOne({studentId: "s1019"});
{
    _id: ObjectId('67ac02a88c4fafea1dcb0cf2'),
    firstName: 'John',
    lastName: 'Smith',
    studentId: 's1019',
    houseId: 'h1007'
}
```

ASSIGNMENT 6.2 - AGGREGATE QUERIES

Part 2.d: Delete the newly added student

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.deleteOne({studentId: "s1019"}); { acknowledged: true, deletedCount: 1 }
```

Part 2.d proof:

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.findOne({studentId: "s1019"});
null
```

ASSIGNMENT 6.2 - AGGREGATE QUERIES

Part 2.e: Display all students by house

Command:

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.houses.find().forEach(function(house){print("\nhouse: " + house.houseId);db.students.find({"houseId": house.houseId}).forEach(printjson);});
```

Student by Houses:

```
house: h1010
                                                                                                                                       house: h1009
                                             house: h1008
house: h1007
                                               _id: ObjectId('67abf1468c4fafea1dcb0ce9'), _id: ObjectId('67abf1478c4fafea1dcb0cef'), _id: ObjectId('67abf1478c4fafea1dcb0cec'),
  _id: ObjectId('67abf1468c4fafea1dcb0ce6'),
                                               firstName: 'Bridget',
                                                                                            firstName: 'Lucius',
                                                                                                                                         firstName: 'Luna',
 firstName: 'Albus',
                                               lastName: 'Wenlock',
                                                                                            lastName: 'Malfoy',
                                                                                                                                         lastName: 'Lovegood',
 lastName: 'Dumbledore',
                                                                                                                                         studentId: 's1013',
                                               studentId: 's1010',
                                                                                            studentId: 's1016',
 studentId: 's1007',
                                                                                                                                         houseId: 'h1009'
                                               houseId: 'h1008'
                                                                                            houseId: 'h1010'
 houseId: 'h1007'
                                               _id: ObjectId('67abf1468c4fafea1dcb0cea'),
                                                                                                                                         _id: ObjectId('67abf1478c4fafea1dcb0ced'),
                                                                                            _id: ObjectId('67abf1478c4fafea1dcb0cf0'),
  _id: ObjectId('67abf1468c4fafea1dcb0ce7'),
                                               firstName: 'Cedric',
                                                                                            firstName: 'Albus',
                                                                                                                                         firstName: 'Sybill',
 firstName: 'Minerva',
                                               lastName: 'Diggory',
                                                                                                                                         lastName: 'Trelawney',
                                                                                            lastName: 'Potter',
 lastName: 'McGonagall',
                                               studentId: 's1011',
                                                                                                                                         studentId: 's1014',
                                                                                            studentId: 's1017',
 studentId: 's1008',
                                               houseId: 'h1008'
                                                                                                                                         houseId: 'h1009'
                                                                                            houseId: 'h1010'
 houseId: 'h1007'
                                               id: ObjectId('67abf1478c4fafea1dcb0ceb'),
                                                                                                                                         _id: ObjectId('67abf1478c4fafea1dcb0cee'),
                                                                                            _id: ObjectId('67abf1478c4fafea1dcb0cf1'),
  id: ObjectId('67abf1468c4fafea1dcb0ce8'),
                                               firstName: 'Hannah',
                                                                                                                                         firstName: 'Cho',
                                                                                            firstName: 'Bellatrix',
 firstName: 'Hagrid',
                                               lastName: 'Abbott',
                                                                                                                                         lastName: 'Chang',
 lastName: 'Rubeus',
                                                                                            lastName: 'Lestrange',
                                               studentId: 's1012',
                                                                                                                                         studentId: 's1015',
 studentId: 's1009',
                                                                                            studentId: 's1018',
                                               houseId: 'h1008'
                                                                                                                                         houseId: 'h1009'
 houseId: 'h1007'
                                                                                            houseId: 'h1010'
```

Part 2.f: Display all students in the house Gryffindor

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.students.find({houseId: "h1007"})
    id: ObjectId('67abf1468c4fafea1dcb0ce6'),
   firstName: 'Albus',
    lastName: 'Dumbledore',
    studentId: 's1007',
    houseId: 'h1007'
  },
    id: ObjectId('67abf1468c4fafea1dcb0ce7'),
   firstName: 'Minerva',
    lastName: 'McGonagall',
    studentId: 's1008',
    houseId: 'h1007'
  },
    id: ObjectId('67abf1468c4fafea1dcb0ce8'),
    firstName: 'Hagrid',
    lastName: 'Rubeus',
    studentId: 's1009',
    houseId: 'h1007'
Atlas atlas-dv3k5g-shard-0 [primarv] web335DB>
```

Par 2.g: Display all students in the house with an Eagle mascot.

Command:

```
Atlas atlas-dy3k5g-shard-0 [primary] web335DB> db.houses.find({ mascot: "Eagle" }).forEach(function (house) { ... print("House: " + house.houseId); ... db.students.find({ "houseId": house.houseId }).forEach(printjson); ... });
```

Students with Eagle mascot:

```
House: h1009
  id: ObjectId('67abf1478c4fafea1dcb0cec'),
 firstName: 'Luna',
 lastName: 'Lovegood',
  studentId: 's1013',
 houseId: 'h1009'
  id: ObjectId('67abf1478c4fafea1dcb0ced'),
 firstName: 'Sybill',
  lastName: 'Trelawney',
  studentId: 's1014',
  houseId: 'h1009'
  id: ObjectId('67abf1478c4fafea1dcb0cee'),
 firstName: 'Cho',
  lastName: 'Chang',
  studentId: 's1015',
  houseId: 'h1009'
```