

## MONGODB LAB 1 (PART 2 - DATA MANIPULATION)

//#1. Add a person to the collection. You pick the data, but they should have an empty array for children.

```
db.people.insertOne({first_name: "Claire",  
                    last_name: "Renolds",  
                    email: "clair#cl.com",  
                    gender: "female",  
                    age: 40,  
                    state: "New York",  
                    children: []  
                    })
```

//#2. Add another person. They should have at least two children.

```
db.people.insertOne({  
    first_name: "Nathali",  
    last_name: "Brickel",  
    email: "nathali@nate.com",  
    gender: "Female",  
    age: 63,  
    state: "Wisconsin",  
    children: [{name: "Abbie", age: 34}, {name: "Becca", age: 34}]  
})
```

//#3. Update one person named Clarence. He moved from North Dakota to South Dakota

```
db.people.updateOne({first_name: "Clarence", state: "North Dakota"},  
                   { $set: {state: "South Dakota"} })
```

//#4. Update Rebecca Hayes. Remove her email address.

```
db.people.updateOne({first_name: "Rebecca", last_name: "Hayes"},  
                   { $unset: {email: ""} })
```

//#5. Update everyone from Missouri. They all had a birthday today, so add one to their age.  
(expect 4 matches)

```
db.people.updateMany({ state: "Missouri"},  
    { $inc: { age: 1 } })
```

//#6. Jerry Baker has updated information. Replace with a new document:

```
// { first_name: "Jerry", last_name: "Baker-Mendez", email: "jerry@classic.ly", gender:"Male",  
//age: 28, state: "Vermont", "children": [{ name: "Alan", age: 18}, {name: "Jenny", age: 3}] }
```

```
db.people.replaceOne({ first_name: "Jerry", last_name: "Baker"},  
    { first_name: "Jerry",  
      last_name: "Baker-Mendez",  
      email: "jerry@classic.ly",  
      gender:"Male",  
      age: 28,  
      state: "Vermont",  
      children: [{ name: "Alan", age: 18}, { name: "Jenny", age: 3}] }  
    )
```

//#7. Delete Wanda Bowman

```
db.people.deleteOne({ first_name: "Wanda", last_name: "Bowman" })
```

//#8. Delete everyone who does not have an email address specified. (expect 36 matches - maybe more depending what you added above)

```
db.people.deleteMany({ email: null })
```

// #9. Add several documents to a new submissions collection. Do it all in one command.

(Remember, MongoDB will create the collection for you. Just start adding documents.)

```
// title: "The River Bend", upvotes: 10, downvotes: 2, artist: <ID of Anna Howard>
```

```
// title: "Nine Lives", upvotes: 7, downvotes: 0, artist: <ID of Scott Henderson>
```

```
// title: "Star Bright", upvotes: 19, downvotes: 3, artist: <ID of Andrea Burke>
// title: "Why Like This?", upvotes: 1, downvotes: 5, artist: <ID of Steven Marshall>
// title: "Non Sequitur", upvotes: 11, downvotes: 1, artist: <ID of Gerald Bailey>
```

```
db.submissions.insertMany([
  {title: "The River Bend", upvotes: 10, downvotes: 2, artist:
    ObjectId("62b11da7a23cf15ded234f78")},
  {title: "Nine Lives", upvotes: 7, downvotes: 0, artist:
    ObjectId("62b11da7a23cf15ded234fa6")},
  {title: "Star Bright", upvotes: 19, downvotes: 3, artist:
    ObjectId("62b11da7a23cf15ded235029")},
  {title: "Why Like This?", upvotes: 1, downvotes: 5, artist:
    ObjectId("62b11da7a23cf15ded234faf")},
  {title: "Non Sequitur", upvotes: 11, downvotes: 1, artist:
    ObjectId("62b11da7a23cf15ded234f76")}
])
```

```
// #10. Add 2 upvotes for "The River Bend".
```

```
db.submissions.updateOne({title: "The River Bend"},
  { $inc: { upvotes: 2 } })
```

```
// #11. Add a field round2 = true to all submissions with at least 10 upvotes. (expect 3 matches)
```

```
db.submissions.updateMany({upvotes: { $gte: 10 }},
  { $set: { round2: true } })
```

```
// #12. Update Helen Clark. She had a baby! Add a child, name: Melanie, age: 0.
```

```
db.people.updateOne({ first_name: "Helen", last_name: "Clark" },
  { $push: { children: { name: "Melanie", age: 0 } } })
```

// #13 Joan Bishop has a child named Catherine. She just had a birthday and prefers to go by "Cat". In one query update the child's name to "Cat" and increment her age by one.

```
db.people.updateOne({ first_name: "Joan", last_name: "Bishop" },  
  { $set: { 'children.3.name': "Cat" }, $inc: { 'children.3.age': 1 } })
```

// #14 List all submissions with more downvotes than upvotes.

```
db.submissions.find({ $expr: { $gt: ["$downvotes", "$upvotes"] } })
```