MongoDB Basics

1. **Create a collection called 'games'. We're going to put some games in it.**
   Ans=>
   use games

2. **Add 5 games to the database. Give each document the following properties: name, genre, rating (out of 100)**
   Ans=>
   db.games.save({ name: "Spy Hunter", genre: "Racing", rating: 76});
   db.games.save({ name: "Mario Kart 64", genre: "Racing", rating: 96});
   db.games.save({ name: "Tetris", genre: "Puzzle", rating: 83});
   db.games.save({ name: "Mega Man 5", genre: "Platformer", rating: 81});
   db.games.save({ name: "Star Fox", genre: "Action", rating: 71});

3. **Query to return all games**
   Ans=>
   db.games.find()

4. **Query to format pretty**
   Ans=>
   Db.games.pretty()

5. **Query to find one**
   Ans=>
   db.games.findOne({name:"Mario Kart 64"})

6. **Query to find top 3 highest rated games**
   Ans=>
   db.games.find().limit(3).sort({'rating': -1})

7. **Update your two favorite games to have two achievements called 'Game Master' and 'Speed Demon' by two methods.**
   Javascript to update
   var g = db.games.findOne({'name':'Mega Man 5'})
   g.achievements = []
   g.achievements.push({'name':'Defeat Two Wheeler','points':200})
   g.achievements.push({'name':'Beat the game','points':1200})
   db.games.save(g)

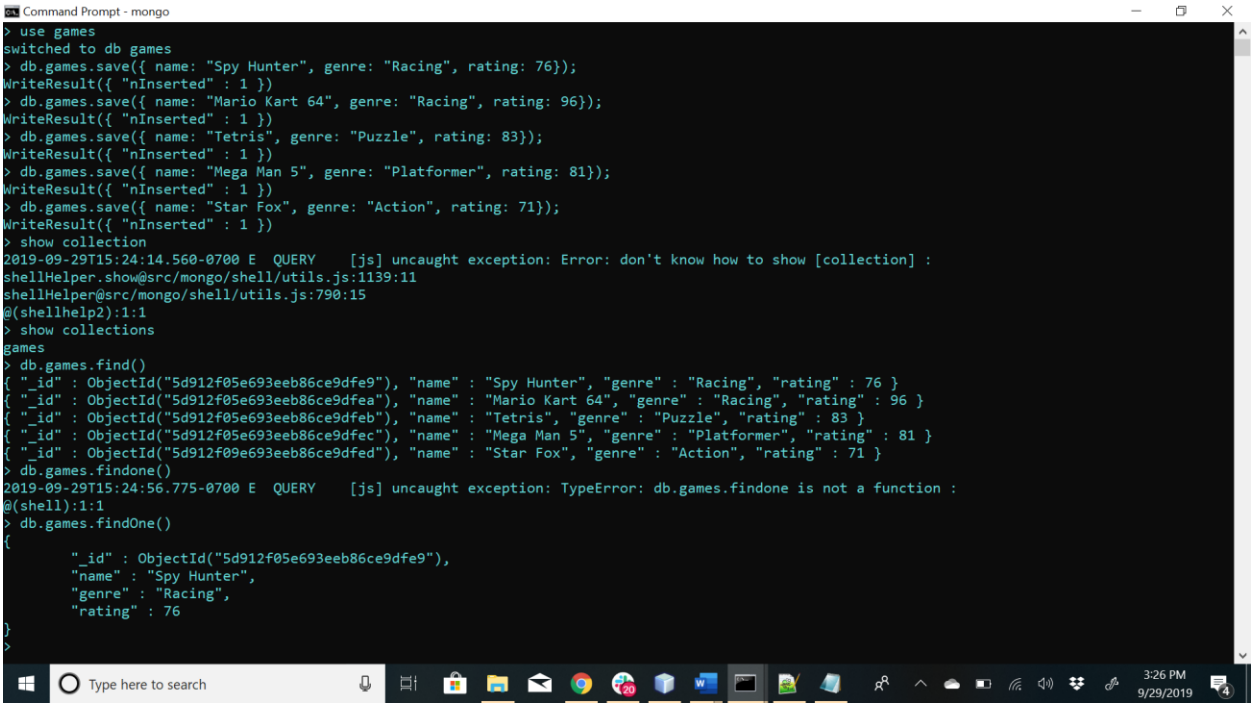
   Other way: because it's javascript, there are any number of steps they can take. Just want them to use save()

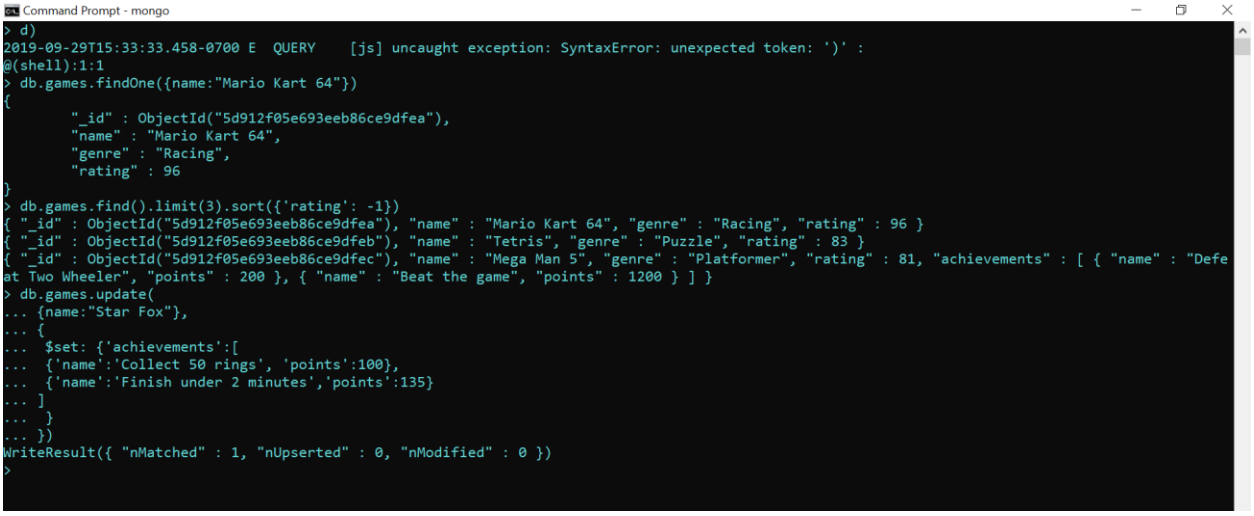
var g = db.games.findOne({'name':'Mega Man 5'}) g.achievements = []
g.achievements.push({'name':'Defeat Two Wheeler','points':200})
g.achievements.push({'name':'Beat the game','points':1200}) db.games.save(g)

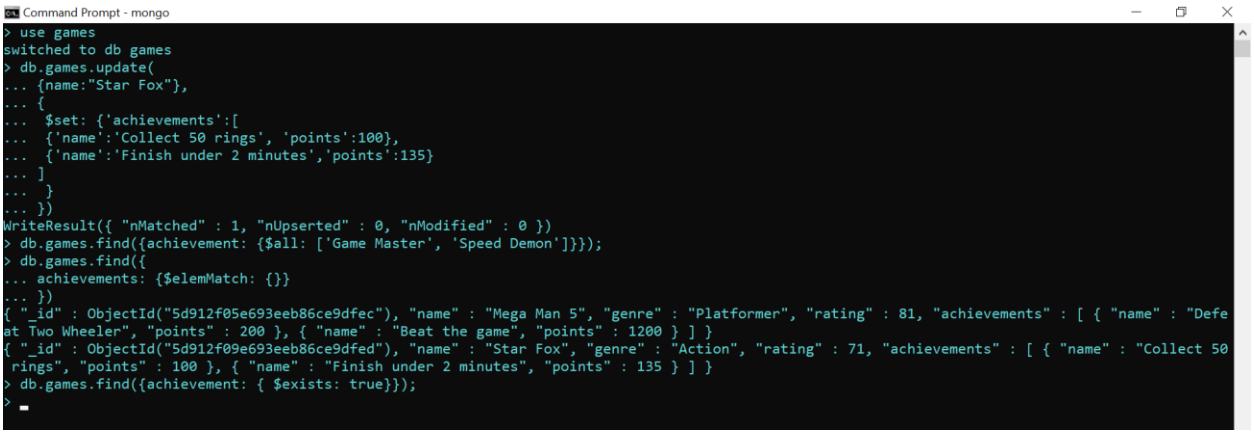
8. **query that returns all the games that have both the 'Game Master' and the 'Speed Demon' achievements.**
   Ans=>
   db.games.find({achievement: {$all: ['Game Master', 'Speed Demon']}});

9. **query that returns only games that have achievements**
   Ans=>
   db.games.find({ achievements: {$elemMatch: {}}

Screenshots for reference:




Command Prompt - mongo
> d)
2019-09-29T15:33:33.458-0700 E QUERY   [js] uncaught exception: SyntaxError: unexpected token: ')' :
@(shell):1:1
> db.games.findOne({name:"Mario Kart 64"})
{
"_id" : ObjectId("5d912f05e693eeb86ce9dfea"),
"name" : "Mario Kart 64",
"genre" : "Racing",
"rating" : 96
}
> db.games.find().limit(3).sort({'rating': -1})
{ "_id" : ObjectId("5d912f05e693eeb86ce9dfea"), "name" : "Mario Kart 64", "genre" : "Racing", "rating" : 96 }
{ "_id" : ObjectId("5d912f05e693eeb86ce9dfeb"), "name" : "Tetris", "genre" : "Puzzle", "rating" : 83 }
{ "_id" : ObjectId("5d912f05e693eeb86ce9dfec"), "name" : "Mega Man 5", "genre" : "Platformer", "rating" : 81, "achievements" : [{ "name" : "Defe
at Two Wheeler", "points" : 200 }, { "name" : "Beat the game", "points" : 1200 }] }
> db.games.update(
... {name:"Star Fox"},
... {
... $set: {'achievements':[
... {'name':'Collect 50 rings', 'points':100},
... {'name':'Finish under 2 minutes','points':135}
...]
... }
... })
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 0 })
>


Command Prompt - mongo
> use games
switched to db games
> db.games.update(
... {name:"Star Fox"},
... {
... $set: {'achievements':[
... {'name':'Collect 50 rings', 'points':100},
... {'name':'Finish under 2 minutes','points':135}
...]
... }
... })
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 0 })
> db.games.find({achievement: {$all: ['Game Master', 'Speed Demon']}});
> db.games.find({
... achievements: {$elemMatch: {}}
... })
{ "_id" : ObjectId("5d912f05e693eeb86ce9dfec"), "name" : "Mega Man 5", "genre" : "Platformer", "rating" : 81, "achievements" : [{ "name" : "Defe
at Two Wheeler", "points" : 200 }, { "name" : "Beat the game", "points" : 1200 }] }
{ "_id" : ObjectId("5d912f09e693eeb86ce9dfed"), "name" : "Star Fox", "genre" : "Action", "rating" : 71, "achievements" : [{ "name" : "Collect 50
 rings", "points" : 100 }, { "name" : "Finish under 2 minutes", "points" : 135 }] }
> db.games.find({achievement: { $exists: true}});
>