Практическое задание 1:

db.towns.insertMany(

[

{

name: "Punxsutawney ",

populatiuon: 6200,

last\_sensus: ISODate("2022-01-31"),

famous\_for: [""],

mayor: {

name: "Jim Wehrle"

}

},

{

name: "New York",

populatiuon: 22200000,

last\_sensus: ISODate("2022-07-31"),

famous\_for: ["status of liberty", "food"],

mayor: {

name: "Michael Bloomberg",

party: "I"

}

},

{

name: "Portland",

populatiuon: 528000,

last\_sensus: ISODate("2022-07-20"),

famous\_for: ["beer", "food"],

mayor: {

name: "Sam Adams",

party: "D"

}

}

])

db.towns.find({"mayor.party": "I"}, {name: 1, mayor: 1})

db.towns.find({"mayor.party": {$exists: false}}, {name: 1, mayor: 1})

Практическое задание 2:

var cursor = db.unicorns.find({gender:"m"});null;

cursor.limit(2).sort({name:1});null;

cursor.forEach(obj => print(obj))

Практическое задание 3:

db.unicorns.find({gender: "f", weight: {$gt : 500, $lt: 600}}, {\_id: false}).count()

Практическое задание 4:

db.unicorns.distinct('loves')

Практическое задание 5:

db.unicorns.aggregate({"$group":{\_id:"$gender",count:{$sum:1}}})

Практическое задание 6:

db.unicorns.insertOne({name: 'Barny', loves: ['grape'], weight: 340, gender: 'm'})

Практическое задание 7:

db.unicorns.updateOne({name : "Ayna"}, {$set: {weight: 800, vampires : 51}}, {upsert: true})

Практическое задание 8:

db.unicorns.updateOne({name : "Raleigh"}, {$set: {loves: ["redbull"]}}, {upsert: true})

Практическое задание 9:

db.unicorns.updateMany({gender: 'm'}, {$inc: {vampires: 5}}, {multi:true})

Практическое задание 10:

db.towns.updateOne({name: "Portland"}, {$unset: {"mayor.party": 1}}, {upsert: true})

Практическое задание 11:

db.unicorns.updateOne({name : "Pilot"}, {$push: {loves: "chocolate"}}, {upsert: true})

Практическое задание 12:

db.unicorns.updateOne({name : "Aurora"}, {$addToSet: {loves: {$each: ["sugar", "limons"]}}}, {upsert: true})

Практическое задание 13:

db.towns.insertMany(

[

{

name: "Punxsutawney ",

popujatiuon: 6200,

last\_sensus: ISODate("2022-01-31"),

famous\_for: ["phil the groundhog"],

mayor: {

name: "Jim Wehrle"

}

},

{

name: "New York",

popujatiuon: 22200000,

last\_sensus: ISODate("2022-07-31"),

famous\_for: ["status of liberty", "food"],

mayor: {

name: "Michael Bloomberg",

party: "I"

}

},

{

name: "Portland",

popujatiuon: 528000,

last\_sensus: ISODate("2022-07-20"),

famous\_for: ["beer", "food"],

mayor: {

name: "Sam Adams",

party: "D"

}

}

])

db.towns.deleteMany({"mayor.party": -1})

db.towns.find()

db.towns.drop()

show collections

---------- Часть 2 ----------

Практическое задание 1:

db.createCollection("areas")

db.areas.insertOne({\_id:"field", name:"Magic Fileds"})

db.areas.insertOne({\_id:"clouds", name:"Magic Clouds"})

Практическое задание 2:

db.unicorns.updateOne({\_id:ObjectId("638371be1afd7086efe5f8cd")},{$set: {area:{$ref:"areas", $id: "clouds"}}})

db.unicorns.updateOne({\_id:ObjectId("638371be1afd7086efe5f8c9")},{$set: {area:{$ref:"areas", $id: "fields"}}})

db.unicorns.ensureIndex({"name" : 1}, {"unique" : true})

Практическое задание 3:

db.unicorns.getIndexes()

db.unicorns.dropIndex("name\_1")

db.unicorns.dropIndex("\_id\_")

Практическое задание 4:

db.createCollection("numbers")

for(i = 0; i < 100000; i++){db.numbers.insert({value: i})}

db.numbers.find().sort({$natural:-1}).limit(4)

db.numbers.ensureIndex({"value" : 1})

db.numbers.find().sort({$natural:-1}).limit(4)