Assignment no 2

Problem Statement: Create a database petshop with collection pets with following structure/data

{name: "Mikey", species: "Gerbil"}, {name: "Davey Bungooligan", species: "Piranha"}, {name: "Suzy B", species: "Cat"}, {name: "Mikey", species: "Hotdog"}, {name: "Terrence", species: "Sausagedog"}, {name: "Philomena Jones", species: "Cat"}

Queries:

Creating database and collection

```
> show dbs
  admin   0.000GB
  config  0.000GB
  local   0.000GB
> use petshop
  switched to db petshop
> show dbs
  admin   0.000GB
  config  0.000GB
  local   0.000GB
> db.createCollection("pets")
  { "ok" : 1 }
> show collections
  pets
```

1. Add another piranha, and a mole rat called Henry.

```
> db.pets.insert({name:"Another piranha",species:"Piranha"})
        WriteResult({ "nInserted" : 1 })
> db.pets.find().pretty()
        {
                "_id" : ObjectId("5e7b518266073a82d319abb9"),
                "name" : "Mickey",
                "species" : "Gerbil"
        }
        {
                "_id" : ObjectId("5e7b518266073a82d319abba"),
                "name" : "Davey Bungooligan",
                "species" : "Piranha"
        }
        {
                "_id" : ObjectId("5e7b518266073a82d319abbb"),
                "name" : "Suzy B",
                "species" : "Cat"
        }
        {
                "_id" : ObjectId("5e7b518266073a82d319abbc"),
                "name" : "Mickey",
                "species" : "Hotdog"
        }
```

```
        {
            "_id" : ObjectId("5e7b518266073a82d319abbd"),
            "name" : "Terrence",
            "species" : "Sausagedog"
        }
        {
            "_id" : ObjectId("5e7b518266073a82d319abbe"),
            "name" : "Philomena Jones",
            "species" : "Cat"
        }
        {
            "_id" : ObjectId("5e7b51cf66073a82d319abbf"),
            "name" : "Another piranha",
            "species" : "Piranha"
        }
> db.pets.insert({name:"Henry",species:"Mole rat"})
        WriteResult({ "nInserted" : 1 })
```

2. use find to list all the pets.

```
> db.pets.find().pretty()
        {
            "_id" : ObjectId("5e7b518266073a82d319abb9"),
            "name" : "Mickey",
            "species" : "Gerbil"
        }
        {
            "_id" : ObjectId("5e7b518266073a82d319abba"),
            "name" : "Davey Bungooligan",
            "species" : "Piranha"
        }
        {
            "_id" : ObjectId("5e7b518266073a82d319abbb"),
            "name" : "Suzy B",
            "species" : "Cat"
        }
        {
            "_id" : ObjectId("5e7b518266073a82d319abbc"),
            "name" : "Mickey",
            "species" : "Hotdog"
        }
        {
            "_id" : ObjectId("5e7b518266073a82d319abbd"),
            "name" : "Terrence",
            "species" : "Sausagedog"
        }
        {
            "_id" : ObjectId("5e7b518266073a82d319abbe"),
            "name" : "Philomena Jones",
            "species" : "Cat"
        }
        {
```

```
        "_id" : ObjectId("5e7b51cf66073a82d319abbf"),
        "name" : "Another piranha",
        "species" : "Piranha"
    }
    {
        "_id" : ObjectId("5e7b51fe66073a82d319abc0"),
        "name" : "Henry",
        "species" : "Mole rat"
    }
```

3. Find the ID of Mikey the Gerbil.

```
> db.pets.find({$and:[{name:"Mickey"},{species:"Gerbil"}]})
    { "_id" : ObjectId("5e7b518266073a82d319abb9"), "name" : "Mickey", "species" : "Gerbil" }
```

4. Use find to find Mikey by id.

```
>db.pets.find({$or:[{"_id":ObjectId("5e7b518266073a82d319abb9")
{"_id":ObjectId("5e7b518266073a82d319abbc")}]})
     { "_id" : ObjectId("5e7b518266073a82d319abb9"), "name" : "Mickey", "species" :  "Gerbil"
    }
     { "_id" : ObjectId("5e7b518266073a82d319abbc"), "name" : "Mickey", "species" : "Hotdog"
    }
```

5. Use find to find all the gerbils.

```
> db.pets.find({species:"Gerbil"})
    { "_id" : ObjectId("5e7b518266073a82d319abb9"), "name" : "Mickey", "species" :
    "Gerbil" }
```

6. Find all the creatures named Mikey.

```
> db.pets.find({name:"Mickey"})
    { "_id" : ObjectId("5e7b518266073a82d319abb9"), "name" : "Mickey", "species" : "Gerbil" }
    { "_id" : ObjectId("5e7b518266073a82d319abbc"), "name" : "Mickey", "species" :
    "Hotdog" }
```

7. Find all the creatures named Mikey who are gerbils.

```
> db.pets.find({$and:[{name:"Mickey"},{species:"Gerbil"}]})
    { "_id" : ObjectId("5e7b518266073a82d319abb9"), "name" : "Mickey", "species" : "Gerbil" }
```

8. Find all the creatures with the string "dog" in their species.

```
> db.pets.find({species:/dog/})
    { "_id" : ObjectId("5e7b518266073a82d319abbc"), "name" : "Mickey", "species" :
    "Hotdog" }
    { "_id" : ObjectId("5e7b518266073a82d319abbd"), "name" : "Terrence", "species" :
    "Sausagedog" }
```

9. Add the price field in the collection for species Cat.

```
> db.pets.update({'species':'Cat'},{$set:{"price":2}},{upsert:false,multi:true})
    WriteResult({ "nMatched" : 2, "nUpserted" : 0, "nModified" : 1 })
> db.pets.find().pretty()
    {
        "_id" : ObjectId("5e7b518266073a82d319abb9"),
        "name" : "Mickey",
```

```
        "species" : "Gerbil"
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abba"),
        "name" : "Davey Bungooligan",
        "species" : "Piranha"
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbb"),
        "name" : "Suzy B",
        "species" : "Cat",
        "price" : 2
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbc"),
        "name" : "Mickey",
        "species" : "Hotdog"
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbd"),
        "name" : "Terrence",
        "species" : "Sausagedog"
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbe"),
        "name" : "Philomena Jones",
        "species" : "Cat",
        "price" : 2
    }
    {
        "_id" : ObjectId("5e7b51cf66073a82d319abbf"),
        "name" : "Another piranha",
        "species" : "Piranha"
    }
    {
        "_id" : ObjectId("5e7b51fe66073a82d319abc0"),
        "name" : "Henry",
        "species" : "Mole rat"
    }
```

10. update the price field for the species Piranha .

```
> db.pets.update({'species':'Piranha'},{$set:{"price":2}},{upsert:false,multi:true})
      WriteResult({ "nMatched" : 2, "nUpserted" : 0, "nModified" : 2 })
> db.pets.find().pretty()
    {
        "_id" : ObjectId("5e7b518266073a82d319abb9"),
        "name" : "Mickey",
        "species" : "Gerbil"
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abba"),
        "name" : "Davey Bungooligan",
```

```
        "species" : "Piranha",
        "price" : 2
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbb"),
        "name" : "Suzy B",
        "species" : "Cat",
        "price" : 2
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbc"),
        "name" : "Mickey",
        "species" : "Hotdog"
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbd"),
        "name" : "Terrence",
        "species" : "Sausagedog"
    }
    {
        "_id" : ObjectId("5e7b518266073a82d319abbe"),
        "name" : "Philomena Jones",
        "species" : "Cat",
        "price" : 2
    }
    {
        "_id" : ObjectId("5e7b51cf66073a82d319abbf"),
        "name" : "Another piranha",
        "species" : "Piranha",
        "price" : 2
    }
    {
        "_id" : ObjectId("5e7b51fe66073a82d319abc0"),
        "name" : "Henry",
        "species" : "Mole rat"
    }
```


11. find the first 5 species

```
> db.pets.aggregate([{$project:{species:1,_id:0}},{$limit:5}])
    { "species" : "Gerbil" }
    { "species" : "Piranha" }
    { "species" : "Cat" }
    { "species" : "Hotdog" }
    { "species" : "Sausagedog" }
```