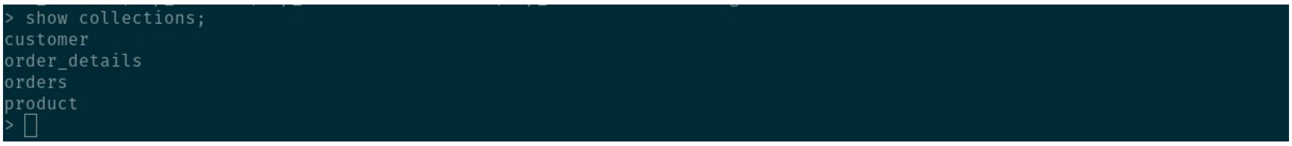
Group C: Assignment No.1

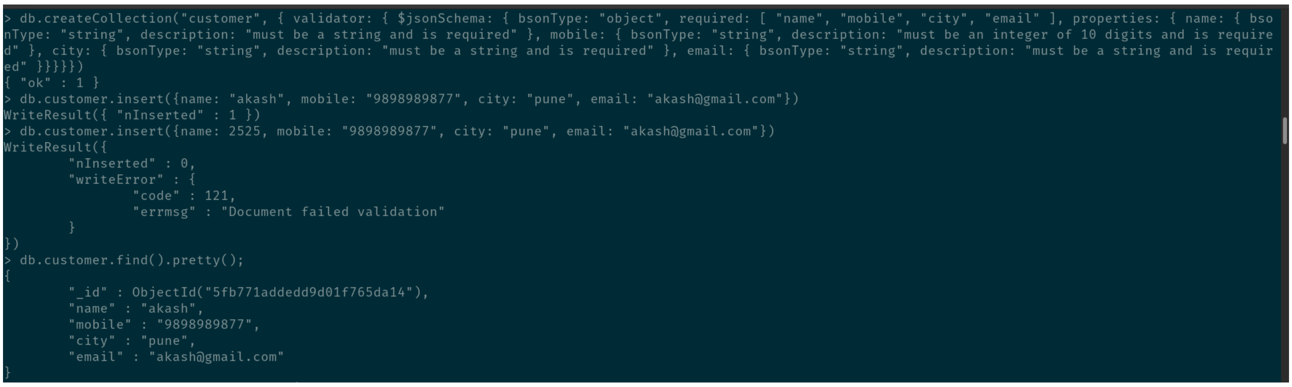
Create a NOSQL DB on “Order management System” using MongoDB and implement following operations on document.

- **Insert (batch insert, insert validation)**
- **Save**
- **Remove**
- **Update**
- **Replace Document**
- **Usage of modifiers**
- **Upserts**
- **Update Multiple documents**

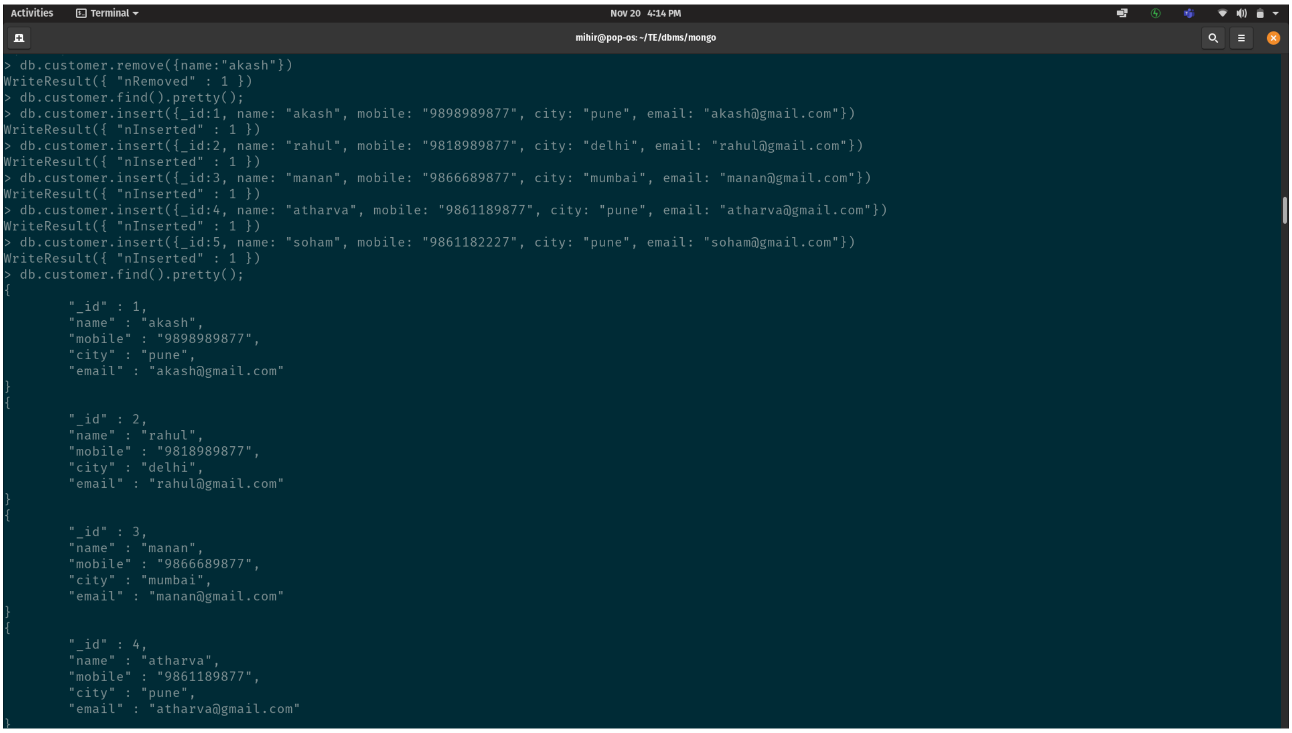
Return updated documents



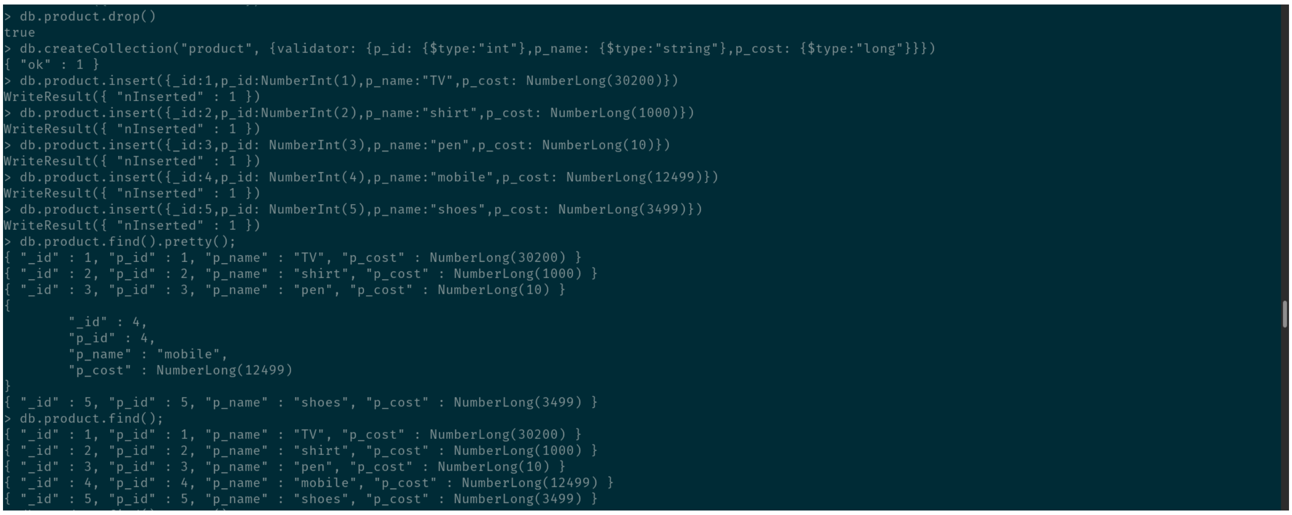
```
> show collections;
customer
order_details
orders
product
> 
```



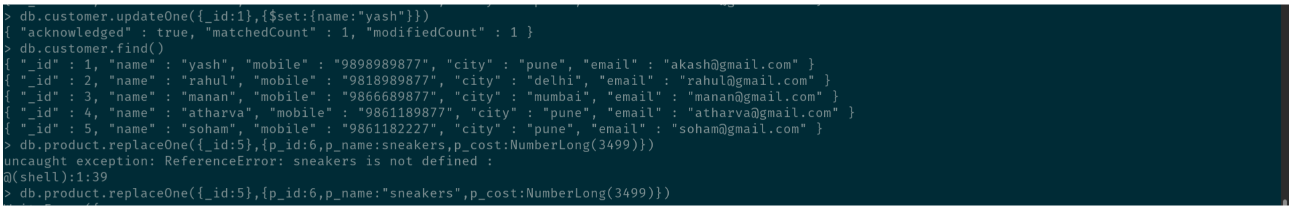
```
> db.createCollection("customer", { validator: { $jsonSchema: { bsonType: "object", required: [ "name", "mobile", "city", "email" ], properties: { name: { bso
nType: "string", description: "must be a string and is required" }, mobile: { bsonType: "string", description: "must be an integer of 10 digits and is require
d" }, city: { bsonType: "string", description: "must be a string and is required" }, email: { bsonType: "string", description: "must be a string and is requir
ed" }}}}})
{ "ok" : 1 }
> db.customer.insert({name: "akash", mobile: "9898989877", city: "pune", email: "akash@gmail.com"})
WriteResult({ "nInserted" : 1 })
> db.customer.insert({name: 2525, mobile: "9898989877", city: "pune", email: "akash@gmail.com"})
WriteResult({
        "nInserted" : 0,
        "writeError" : {
                "code" : 121,
                "errmsg" : "Document failed validation"
        }
})
> db.customer.find().pretty();
{
        "_id" : ObjectId("5fb771addedd9d01f765da14"),
        "name" : "akash",
        "mobile" : "9898989877",
        "city" : "pune",
        "email" : "akash@gmail.com"
}
```



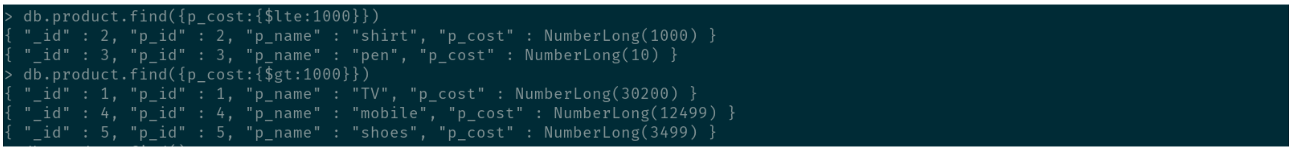
```
> db.customer.remove({name:"akash"})
WriteResult({ "nRemoved" : 1 })
> db.customer.find().pretty();
> db.customer.insert({_id:1, name: "akash", mobile: "9898989877", city: "pune", email: "akash@gmail.com"})
WriteResult({ "nInserted" : 1 })
> db.customer.insert({_id:2, name: "rahul", mobile: "9818989877", city: "delhi", email: "rahul@gmail.com"})
WriteResult({ "nInserted" : 1 })
> db.customer.insert({_id:3, name: "manan", mobile: "9866689877", city: "mumbai", email: "manan@gmail.com"})
WriteResult({ "nInserted" : 1 })
> db.customer.insert({_id:4, name: "atharva", mobile: "9861189877", city: "pune", email: "atharva@gmail.com"})
WriteResult({ "nInserted" : 1 })
> db.customer.insert({_id:5, name: "soham", mobile: "9861182227", city: "pune", email: "soham@gmail.com"})
WriteResult({ "nInserted" : 1 })
> db.customer.find().pretty();
{
        "_id" : 1,
        "name" : "akash",
        "mobile" : "9898989877",
        "city" : "pune",
        "email" : "akash@gmail.com"
}
{
        "_id" : 2,
        "name" : "rahul",
        "mobile" : "9818989877",
        "city" : "delhi",
        "email" : "rahul@gmail.com"
}
{
        "_id" : 3,
        "name" : "manan",
        "mobile" : "9866689877",
        "city" : "mumbai",
        "email" : "manan@gmail.com"
}
{
        "_id" : 4,
        "name" : "atharva",
        "mobile" : "9861189877",
        "city" : "pune",
        "email" : "atharva@gmail.com"
}
```



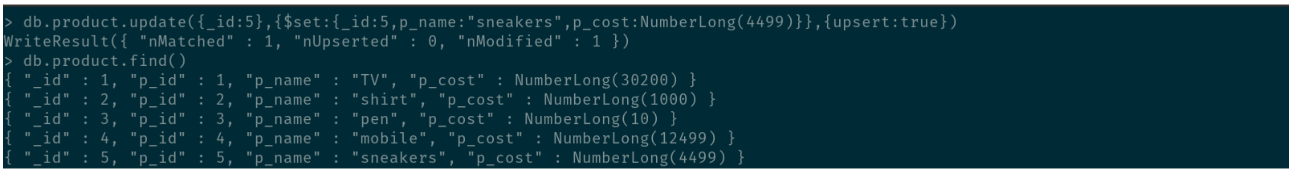
```
> db.product.drop()
true
> db.createCollection("product", {validator: {p_id: {$type:"int"},p_name: {$type:"string"},p_cost: {$type:"long"}}})
{ "ok" : 1 }
> db.product.insert({_id:1,p_id:NumberInt(1),p_name:"TV",p_cost: NumberLong(30200)})
WriteResult({ "nInserted" : 1 })
> db.product.insert({_id:2,p_id:NumberInt(2),p_name:"shirt",p_cost: NumberLong(1000)})
WriteResult({ "nInserted" : 1 })
> db.product.insert({_id:3,p_id: NumberInt(3),p_name:"pen",p_cost: NumberLong(10)})
WriteResult({ "nInserted" : 1 })
> db.product.insert({_id:4,p_id: NumberInt(4),p_name:"mobile",p_cost: NumberLong(12499)})
WriteResult({ "nInserted" : 1 })
> db.product.insert({_id:5,p_id: NumberInt(5),p_name:"shoes",p_cost: NumberLong(3499)})
WriteResult({ "nInserted" : 1 })
> db.product.find().pretty();
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
{ "_id" : 2, "p_id" : 2, "p_name" : "shirt", "p_cost" : NumberLong(1000) }
{ "_id" : 3, "p_id" : 3, "p_name" : "pen", "p_cost" : NumberLong(10) }
{
        "_id" : 4,
        "p_id" : 4,
        "p_name" : "mobile",
        "p_cost" : NumberLong(12499)
}
{ "_id" : 5, "p_id" : 5, "p_name" : "shoes", "p_cost" : NumberLong(3499) }
> db.product.find();
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
{ "_id" : 2, "p_id" : 2, "p_name" : "shirt", "p_cost" : NumberLong(1000) }
{ "_id" : 3, "p_id" : 3, "p_name" : "pen", "p_cost" : NumberLong(10) }
{ "_id" : 4, "p_id" : 4, "p_name" : "mobile", "p_cost" : NumberLong(12499) }
{ "_id" : 5, "p_id" : 5, "p_name" : "shoes", "p_cost" : NumberLong(3499) }
```



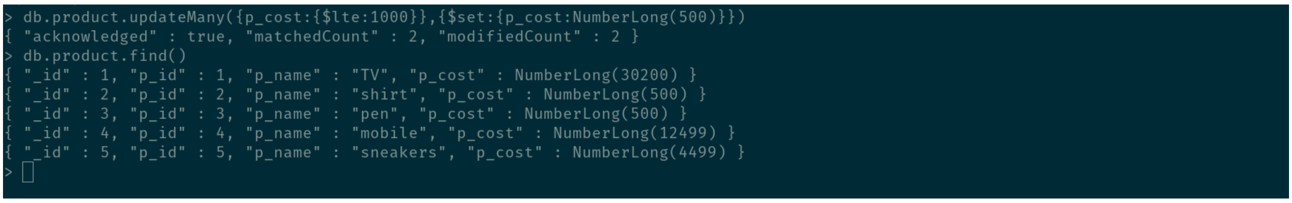
```
> db.customer.updateOne({_id:1},{$set:{name:"yash"}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.customer.find()
{ "_id" : 1, "name" : "yash", "mobile" : "9898989877", "city" : "pune", "email" : "akash@gmail.com" }
{ "_id" : 2, "name" : "rahul", "mobile" : "9818989877", "city" : "delhi", "email" : "rahul@gmail.com" }
{ "_id" : 3, "name" : "manan", "mobile" : "9866689877", "city" : "mumbai", "email" : "manan@gmail.com" }
{ "_id" : 4, "name" : "atharva", "mobile" : "9861189877", "city" : "pune", "email" : "atharva@gmail.com" }
{ "_id" : 5, "name" : "soham", "mobile" : "9861182227", "city" : "pune", "email" : "soham@gmail.com" }
> db.product.replaceOne({_id:5},{p_id:6,p_name:sneakers,p_cost:NumberLong(3499)})
uncaught exception: ReferenceError: sneakers is not defined :
@(shell):1:39
> db.product.replaceOne({_id:5},{p_id:6,p_name:"sneakers",p_cost:NumberLong(3499)})
```



```
> db.product.find({p_cost:{$lte:1000}})
{ "_id" : 2, "p_id" : 2, "p_name" : "shirt", "p_cost" : NumberLong(1000) }
{ "_id" : 3, "p_id" : 3, "p_name" : "pen", "p_cost" : NumberLong(10) }
> db.product.find({p_cost:{$gt:1000}})
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
{ "_id" : 4, "p_id" : 4, "p_name" : "mobile", "p_cost" : NumberLong(12499) }
{ "_id" : 5, "p_id" : 5, "p_name" : "shoes", "p_cost" : NumberLong(3499) }
```



```
> db.product.update({_id:5},{$set:{_id:5,p_name:"sneakers",p_cost:NumberLong(4499)}},{upsert:true})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.product.find()
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
{ "_id" : 2, "p_id" : 2, "p_name" : "shirt", "p_cost" : NumberLong(1000) }
{ "_id" : 3, "p_id" : 3, "p_name" : "pen", "p_cost" : NumberLong(10) }
{ "_id" : 4, "p_id" : 4, "p_name" : "mobile", "p_cost" : NumberLong(12499) }
{ "_id" : 5, "p_id" : 5, "p_name" : "sneakers", "p_cost" : NumberLong(4499) }
```



```
> db.product.updateMany({p_cost:{$lte:1000}},{$set:{p_cost:NumberLong(500)}})
{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }
> db.product.find()
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
{ "_id" : 2, "p_id" : 2, "p_name" : "shirt", "p_cost" : NumberLong(500) }
{ "_id" : 3, "p_id" : 3, "p_name" : "pen", "p_cost" : NumberLong(500) }
{ "_id" : 4, "p_id" : 4, "p_name" : "mobile", "p_cost" : NumberLong(12499) }
{ "_id" : 5, "p_id" : 5, "p_name" : "sneakers", "p_cost" : NumberLong(4499) }
>
```