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SL1 ASSIGNMENT 12

Problem Statement : Create a database with suitable example using MongoDB and implement

- Inserting and saving document (batch insert, insert validation)
- Removing document
- Updating document (document replacement, using modifiers, upserts, updating multiple documents, returning updated documents)

Creating the collection with validations

```
db.createCollection( "Orders", { validator: { order_id: {$type:"double"},
prod_name: {$type:"string"}, quantity: {$type:"double"}, price:
{$type:"double"}, delivery_date: {$type:"date"} }} );
```

Inserting Documents in collection

```
> db.Orders.insert({order_id : 1001, prod_name : 12345, quantity : 1, price :
100, delivery_date : new Date(2001,2,20)});
```

```
WriteResult({
  "nInserted" : 0,
  "writeError" : {
    "code" : 121,
    "errmsg" : "Document failed validation"
  }
})
```

```
> db.Orders.insert({order_id : 10, prod_name : 'sanitizer', quantity : 1,
price : 100, delivery_date : new Date(2001,2,20)});
WriteResult({ "nInserted" : 1 })
```

Batch Insert

```
> db.Orders.insertMany([{order_id : 11, prod_name : 'sweatshirt', quantity : 2,
price : 3000, delivery_date : new Date(2010,7,12)}, {order_id : 12, prod_name :
'laptop', quantity : 1, price : 50000, delivery_date : new Date(2020,11,20)}]);
```

```
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("5fc1d6b27ba587b219205f0e"),
    ObjectId("5fc1d6b27ba587b219205f0f")
  ]
}
> db.Orders.find().pretty();
{
  "_id" : ObjectId("5fc1d5bf7ba587b219205f0a"),
  "order_id" : 10,
  "prod_name" : "sanitizer",
  "quantity" : 1,
```

```

    "price" : 100,
    "delivery_date" : ISODate("2001-03-19T18:30:00Z")
  }
  {
    "_id" : ObjectId("5fc1d6b27ba587b219205f0e"),
    "order_id" : 11,
    "prod_name" : "sweatshirt",
    "quantity" : 2,
    "price" : 3000,
    "delivery_date" : ISODate("2010-08-11T18:30:00Z")
  }
  {
    "_id" : ObjectId("5fc1d6b27ba587b219205f0f"),
    "order_id" : 12,
    "prod_name" : "laptop",
    "quantity" : 1,
    "price" : 50000,
    "delivery_date" : ISODate("2020-12-19T18:30:00Z")
  }
}

```

Update

```

> db.Orders.update({ order_id : 12}, {$set : {prod_name : "apple 12"}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Orders.find().pretty();
{
  "_id" : ObjectId("5fc1d5bf7ba587b219205f0a"),
  "order_id" : 10,
  "prod_name" : "sanitizer",
  "quantity" : 1,
  "price" : 100,
  "delivery_date" : ISODate("2001-03-19T18:30:00Z")
}
{
  "_id" : ObjectId("5fc1d6b27ba587b219205f0e"),
  "order_id" : 11,
  "prod_name" : "sweatshirt",
  "quantity" : 2,
  "price" : 3000,
  "delivery_date" : ISODate("2010-08-11T18:30:00Z")
}
{
  "_id" : ObjectId("5fc1d6b27ba587b219205f0f"),
  "order_id" : 12,
  "prod_name" : "apple 12",
  "quantity" : 1,
  "price" : 50000,
  "delivery_date" : ISODate("2020-12-19T18:30:00Z")
}

```

Delete

```

> db.Orders.remove({order_id : 12});
WriteResult({ "nRemoved" : 1 })
> db.Orders.find().pretty();
{
  "_id" : ObjectId("5fc1d5bf7ba587b219205f0a"),
  "order_id" : 10,
  "prod_name" : "sanitizer",
  "quantity" : 1,

```

```

    "price" : 100,
    "delivery_date" : ISODate("2001-03-19T18:30:00Z")
  }
  {
    "_id" : ObjectId("5fc1d6b27ba587b219205f0e"),
    "order_id" : 11,
    "prod_name" : "sweatshirt",
    "quantity" : 2,
    "price" : 3000,
    "delivery_date" : ISODate("2010-08-11T18:30:00Z")
  }

```

Updating Multiple Documents

```

> db.Orders.update({}, {$set : {quantity : 15}}, {multi : true});
WriteResult({ "nMatched" : 2, "nUpserted" : 0, "nModified" : 2 })
> db.Orders.find().pretty();
{
  "_id" : ObjectId("5fc1d5bf7ba587b219205f0a"),
  "order_id" : 10,
  "prod_name" : "sanitizer",
  "quantity" : 15,
  "price" : 100,
  "delivery_date" : ISODate("2001-03-19T18:30:00Z")
}
{
  "_id" : ObjectId("5fc1d6b27ba587b219205f0e"),
  "order_id" : 11,
  "prod_name" : "sweatshirt",
  "quantity" : 15,
  "price" : 3000,
  "delivery_date" : ISODate("2010-08-11T18:30:00Z")
}

```

Upsert

```

> db.Orders.update({order_id : 11}, {order_id : 17, prod_name : 'wardrobe',
quantity : 2, price : 7000, delivery_date : new Date(2010,7,12)}, {upsert :
true});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Orders.find().pretty();
{
  "_id" : ObjectId("5fc1d5bf7ba587b219205f0a"),
  "order_id" : 10,
  "prod_name" : "sanitizer",
  "quantity" : 15,
  "price" : 100,
  "delivery_date" : ISODate("2001-03-19T18:30:00Z")
}
{
  "_id" : ObjectId("5fc1d6b27ba587b219205f0e"),
  "order_id" : 17,
  "prod_name" : "wardrobe",
  "quantity" : 2,
  "price" : 7000,
  "delivery_date" : ISODate("2010-08-11T18:30:00Z")
}

```