

Database II – MongoDB

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Q1

1.

```
test> use ecommerce
switched to db ecommerce
```

2.

```
ecommerce> db.createCollection("products")
{ ok: 1 }
```

3.

```
ecommerce> db.products.insertMany([
... {Product_name:"Tablet",
... Unit_price:120000,
... Quantity:20
... },
... {Product_name:"Smart phone",
... Unit_price:80000,
... Quantity:10
... },
... {Product_name:"Laptop",
... Unit_price:250000,
... Quantity:14
... },
... {Product_name:"Web camera",
... Unit_price:75000,
... Quantity:30
... }
... ])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6760f20566c0dde76f228fb5'),
    '1': ObjectId('6760f20566c0dde76f228fb6'),
    '2': ObjectId('6760f20566c0dde76f228fb7'),
    '3': ObjectId('6760f20566c0dde76f228fb8')
  }
}
```

4.

```
ecommerce> db.products.find()
[
  {
    _id: ObjectId('6760f20566c0dde76f228fb5'),
    Product_name: 'Tablet',
    Unit_price: 120000,
    Quantity: 20
  },
  {
    _id: ObjectId('6760f20566c0dde76f228fb6'),
    Product_name: 'Smart phone',
    Unit_price: 80000,
    Quantity: 10
  },
  {
    _id: ObjectId('6760f20566c0dde76f228fb7'),
    Product_name: 'Laptop',
    Unit_price: 250000,
    Quantity: 14
  },
  {
    _id: ObjectId('6760f20566c0dde76f228fb8'),
    Product_name: 'Web camera',
    Unit_price: 75000,
    Quantity: 30
  }
]
```

5.

```
ecommerce> db.products.updateOne({Product_name:"Tablet"},
... { $set:{ Quantity:45}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

6.

```
ecommerce> db.products.deleteOne({Product_name:"Tablet"})
{ acknowledged: true, deletedCount: 1 }
```

Q2

1.

```
ecommerce> use xyz_institute
switched to db xyz_institute
xyz_institute> |
```

2.

```
xyz_institute> db.createCollection("courses")
{ ok: 1 }
xyz_institute> db.courses.insertOne(
... { CourseName:"Computer Science 101",
...   Instructor:"Professor Smith",
...   Schedule:"Monday and Wednesday, 9:00 AM - 10:30 AM",
...   Credits:3
... })
{
  acknowledged: true,
  insertedId: ObjectId('6760f63266c0dde76f228fb9')
}
```

a.

```
xyz_institute> db.courses.find()
[
  {
    _id: ObjectId('6760f63266c0dde76f228fb9'),
    CourseName: 'Computer Science 101',
    Instructor: 'Professor Smith',
    Schedule: 'Monday and Wednesday, 9:00 AM - 10:30 AM',
    Credits: 3
  }
]
```

b.

```
xyz_institute> db.courses.updateOne({ CourseName: "Computer Science 101" },
{ $set: { Schedule:"Tuesday and Thursday, 2:00 PM - 3:30 PM"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

c.

```
xyz_institute> db.courses.deleteOne({CourseName:"Computer Science 101"})
{ acknowledged: true, deletedCount: 1 }
```

3.

```
xyz_institute> db.createCollection("students")
{ ok: 1 }
xyz_institute> db.students.insertOne(
... {StudentName: "Alice Johnson",
... Age: 20,
... Major: "Physics"
... })
{
  acknowledged: true,
  insertedId: ObjectId('6760f8b366c0dde76f228fba')
}
```

a.

```
xyz_institute> db.students.updateOne({StudentName: "Alice Johnson"},
... {$set: {Major: "Computer Science"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

b.

```
xyz_institute> db.students.deleteOne({ StudentName: "Alice Johnson" })
{ acknowledged: true, deletedCount: 1 }
```

4.

```
xyz_institute> show collections
sources
students
xyz_institute> |
```

5.

```
xyz_institute> db.sources.drop()
true
```