Part 1
use simpleClinic

```
//2
db.patients.insertOne({
    firstName: "Ben",
    lastName: "Choi",
    age: 18,
    history:[
        {disease: "cold", treatment: "pain killer"},
        {checkup: "annual", output: "OK"},
        {disease: "sore throat", treatment: "antibodies"}
    ]
})

//3
db.patients.insertMany([{
    firstName: "Amanda",
    lastName: "Tan",
    age: 32,
    history:[
        {disease: "cold", treatment: "pain killer"},
        {checkup: "annual", output: "OK"},
        {disease: "sore throat", treatment: "antibodies"}
    ]
},{
    firstName: "Mason",
    lastName: "Greenwood",
    age: 20,
    history:[
        {disease: "covid", treatment: "SHN"},
        {checkup: "annual", output: "OK"}
    ]
},{
    firstName: "Dean",
    lastName: "Henderson",
    age: 40,
    history:[
        {disease: "flu", treatment: "tissues"},
        {checkup: "annual", output: "OK"}
    ]
}])

//4
```

```
db.patients.find()

//5
db.patients.find(
    {"age":{$gt:30}}
)

db.patients.deleteMany(
    {"history.disease":"flu"}
)
```

Part 2

Collection 1: Customer
Collection 2: Orders with embedded OrderLine
Collection 3: Products

Sample document (Collection 1)
{
      CustomerID: 1000,
      Name: "Ben Choi"
}

Sample document (Collection 2)
{
      OrderID: 1880001,
      CustomerID: 1000,
      OrderDate: 2020/01/21,
      Lines: [
            { ProductID: 50001, Quantity: 2 },
            { ProductID: 50003, Quantity: 1 }
      ]
}

Sample document (Collection 3)
{
      ProductID: 50001,
      ProductName: "Scott Pick A Size Multi Purpose Towels",
      Price: 4.25
}

Rationale
- OrderLine and Orders are dependent on both Customers and Products
- Documents in Customers and Products can be created independently
- In most cases
    - A user will only want to view all his/her orders e.g. check for order history
    - Products are likely to display a feed of results based on a user search and filters. By having it as a collection, it will be easy to perform any query
    - Data analyst / Business Intelligence with Amazon can easily perform analysis on orders, such as the number of orders per day
- Advantage of the proposed structure
    - Minimal repeated information too
    - Allow for quick search and lookup, as well as any data analysis purposes