Project MongoDB

- Create database name Mydb
  - use Mydb
- Create collections named **Order** and **PlacedOrder**:
  - db.createCollection(“Order”)
  - db.createCollection(“PlacedOrder”)
- Insert documents into the collection **Order**
  - db.Order.insert({"orderId": "ORD31","Set": {"orderStatus": "Scheduled for Manufacturing"}})
  - db.Order.insert({"orderId": "ORD32","Set": {"orderStatus": "Placed"}})
  - db.Order.insert({"orderId": "ORD33","Set": {"orderStatus": "Scheduled for Manufacturing"}})
  - db.Order.insert({"orderId": "ORD34","Set": {"orderStatus": "Placed"}})
- Insert documents into collection **PlacedOrder**
  - db.PlacedOrder.insert({"orderId": "ORD131","manufacturer": "Honda"})
  - db.PlacedOrder.insert({"orderId": "ORD11","manufacturer": "Ferrai"})
  - db.PlacedOrder.insert({"orderId": "ORD130","manufacturer": "BMW"})
- Create new collection named as **Users**
  - db.createCollection(“Users”)

1. Task 1: Insert new document
    a. Insert a document into the collection named “**Users”**
        i. db.Users.insert({“userID” : 1092, “name” : “Simon”, “password” : “abcd123”})

```
> db.Users.insert({"userID" : 1092,"name" : "Simon", "password" : "abcd123"})
WriteResult({ "nInserted" : 1 })
```

    b. To view the documents of the collection “**Users**”
        i. db.Users.find()

```
> db.Users.find()
{ "_id" : ObjectId("5eb1546b05cdb182a9782d8a"), "userID" : 1092, "name" : "Simon", "password" : "abcd123" }
```

2. Task 2: Update Status
    a. Before updating orderID = ORD34

```
> db.Order.find({"orderId" : "ORD34"},{_id:0})
{ "orderId" : "ORD34", "Set" : { "orderStatus" : "Placed" } }
```

    b. Command to update the status of ORD34 from “Placed” to “Scheduled for Manufacturing”
        i. db.Order.update({“orderId”: ”ORD34”}, {$set:{“Set.orderStatus” : “ Scheduled for Manufacturing”}})

    c. After updating the status

```
> db.Order.find({"orderId" : "ORD34"},{_id:0})
{ "orderId" : "ORD34", "Set" : { "orderStatus" : "Scheduled for Manufacturing" } }
```

3. Task 3: Find Incorrect document
    a. Find the document where “manufacturer”: “Ferrai”
        i. db.PlaceOrder.find({“manufacturer”:”Ferrai”},{_id:0})

```
> db.PlacedOrder.find({"manufacturer" : "Ferrai"},{_id:0})
{ "orderId" : "ORD11", "manufacturer" : "Ferrai" }
```

Here, for the “manufacturer”: “Ferrai” the orderId is ORD11. However, in the problem statement, the orderID is ORD116.

- db.PlacedOrder.insert {"orderId": "ORD131","manufacturer": "Honda"},
  {"orderId": "ORD116", "manufacturer": "Ferrai"},
  {"orderId": "ORD130", "manufacturer": "BMW"})

4. Task 4: Remove incorrect data
    a. Command to remove the incorrect “orderId” of the “manufacturer” : “Ferrai”.
        i. db.PlacedOrder.update({“manufacturer”: “Ferrai”},{$unset:{orderId:1}})

```
> db.PlacedOrder.find().pretty()
{
        "_id" : ObjectId("5eb1664905cdb182a9782d8f"),
        "orderId" : "ORD131",
        "manufacturer" : "Honda"
}
{ "_id" : ObjectId("5eb1664905cdb182a9782d90"), "manufacturer" : "Ferrai" }
{
        "_id" : ObjectId("5eb1664c05cdb182a9782d91"),
        "orderId" : "ORD130",
        "manufacturer" : "BMW"
}
```

Here, we can see in the collection PlaceOrder, the second document “manufacturer”: “Ferrai” orderId has been removed. Similarly, we can remove the manufacturer key by keeping the orderId key.

- db.PlacedOrder.update({“manufacturer”:”Ferrai”},{$unset:{“manufacturer”:1}})

```
> db.PlacedOrder.find().pretty()
{
        "_id" : ObjectId("5eb55737a059f3389f41bb80"),
        "orderId" : "ORD131",
        "manufacturer" : "Honda"
}
{ "_id" : ObjectId("5eb55737a059f3389f41bb81"), "orderId" : "ORD11" }
{
        "_id" : ObjectId("5eb55738a059f3389f41bb82"),
        "orderId" : "ORD130",
        "manufacturer" : "BMW"
}
```

5. Task 5: Delete unwanted document
    a. Command to delete the 2nd document from the collection PlaceOrder
        i. db.PlaceOrder.deleteOne({“manufacturer”:”Ferrai”})

OR

        ii. db.PlacedOrder.deleteOne({“orderId”:”ORD11”})

```
> db.PlacedOrder.find().pretty()
{
        "_id" : ObjectId("5eb16fd3a7acd470ef6c0aa3"),
        "orderId" : "ORD131",
        "manufacturer" : "Honda"
}
{
        "_id" : ObjectId("5eb16fd5a7acd470ef6c0aa5"),
        "orderId" : "ORD130",
        "manufacturer" : "BMW"
}
```

Thus, we would use a.i to delete the document if the orderId has been removed in Task 4 or use a.ii to delete the document if manufacturer has been removed. Hence, we can see in the screenshot the 2nd document has been deleted.

    b. Command to delete the PlacedOrder collection.
        i. db.PlacedOrder.drop()