LAB ASSIGNMENT – 4

DATE: 19/02/2024

**WRITE THE QUERIES TO PERFORM THE FOLLOWING OPERATIONS:**

**Q1: Create one collection name “User Details”. Inside that collection create multiple documents containing user details having the following attributes:**

1. **User id**
2. **User name**
3. **Password**

**Ans:**

use adamas

db.createCollection**(**"userdetails"**)**

const User\_ID=**[**"U001"**,**"U002"**,**"U003"**,**"U004"**,**"U005"**]**

const User\_Name=**[**"Ram"**,**"Isha"**,**"Shaan"**,**"Rohini"**,**"Ankit"**]**

const Password=**[**"abc12"**,**"def34"**,**"ghi56"**,**"jkl78"**,**"mno90"**]**

for**(**let i=0**;**i<5**;**i++**)**

**{**

db.userdetails.insertOne**({**"User\_ID"**:**User\_ID**[**i**],**"User\_Name"**:**User\_Name**[**i**],**"Password"**:**Password**[**i**]})**

**}**

db.userdetails.find**()**

**Output:**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd87"**),**

"User\_ID" **:** "U001"**,**

"User\_Name" **:** "Ram"**,**

"Password" **:** "abc12"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd88"**),**

"User\_ID" **:** "U002"**,**

"User\_Name" **:** "Isha"**,**

"Password" **:** "def34"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd89"**),**

"User\_ID" **:** "U003"**,**

"User\_Name" **:** "Shaan"**,**

"Password" **:** "ghi56"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8a"**),**

"User\_ID" **:** "U004"**,**

"User\_Name" **:** "Rohini"**,**

"Password" **:** "jkl78"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8b"**),**

"User\_ID" **:** "U005"**,**

"User\_Name" **:** "Ankit"**,**

"Password" **:** "mno90"

**}**

**Q2: Create one more collection name “User Reviews” with the following attributes:**

1. **User id**
2. **Rating**

**Ans:**

db.createCollection**(**"userreviews"**)**

const User\_ID=**[**"U001"**,**"U002"**,**"U003"**,**"U004"**,**"U005"**]**

const Ratings=**[**"2-star"**,**"5-star"**,**"3-star"**,**"4-star"**,**"1-star"**]**

for**(**let i=0**;**i<5**;**i++**)**

**{**

db.userreviews.insertOne**({**"User\_ID"**:**User\_ID**[**i**],**"Ratings"**:**Ratings**[**i**]})**

**}**

**db**.**userreviews**.**find()**

**Output:**

**{**

"\_id" **:** ObjectId**(**"65d9c158bff275e3c920fd8c"**),**

"User\_ID" **:** "U001"**,**

"Ratings" **:** "2-star"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c158bff275e3c920fd8d"**),**

"User\_ID" **:** "U002"**,**

"Ratings" **:** "5-star"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c158bff275e3c920fd8e"**),**

"User\_ID" **:** "U003"**,**

"Ratings" **:** "3-star"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c158bff275e3c920fd8f"**),**

"User\_ID" **:** "U004"**,**

"Ratings" **:** "4-star"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c158bff275e3c920fd90"**),**

"User\_ID" **:** "U005"**,**

"Ratings" **:** "1-star"

**}**

**Q3: Display only the first two characters of username from collection “User Details”.**

**Ans:**

db.userdetails.aggregate**([**

**{**

$project**:** **{**

firstTwoChars**:** **{** $substr**:** **[**"$User\_Name"**,** 0**,** 2**]** **}**

**}**

**}**

**])**

**Output:**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd87"**),**

"firstTwoChars" **:** "Ra"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd88"**),**

"firstTwoChars" **:** "Is"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd89"**),**

"firstTwoChars" **:** "Sh"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8a"**),**

"firstTwoChars" **:** "Ro"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8b"**),**

"firstTwoChars" **:** "An"

**}**

**Q4: Add an attribute in the collection “User Details” containing the following details Address with sub attributes City, State, Pin-code.**

**Ans:**

db.userdetails.update**({**"User\_Name"**:**"Ram"**},{**

$set**:** **{**

"Address"**:** **{**

"City"**:**"Kolkata"**,**

"State"**:**"West Bengal"**,**

"Pincode"**:**700126

**}**

**}**

**})**

db.userdetails.update**({**"User\_Name"**:**"Isha"**},{**

$set**:** **{**

"Address"**:** **{**

"City"**:**"Barasat"**,**

"State"**:**"West Bengal"**,**

"Pincode"**:**700124

**}**

**}**

**})**

db.userdetails.update**({**"User\_Name"**:**"Shaan"**},{**

$set**:** **{**

"Address"**:** **{**

"City"**:**"Siliguri"**,**

"State"**:**"West Bengal"**,**

"Pincode"**:**734001

**}**

**}**

**})**

db.userdetails.update**({**"User\_Name"**:**"Rohini"**},{**

$set**:** **{**

"Address"**:** **{**

"City"**:**"Malda"**,**

"State"**:**"West Bengal"**,**

"Pincode"**:**732101

**}**

**}**

**})**

db.userdetails.update**({**"User\_Name"**:**"Ankit"**},{**

$set**:** **{**

"Address"**:** **{**

"City"**:**"Shantiniketan"**,**

"State"**:**"West Bengal"**,**

"Pincode"**:**731235

**}**

**}**

**})**

db.userdetails.find**()**

**Output:**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd87"**),**

"User\_ID" **:** "U001"**,**

"User\_Name" **:** "Ram"**,**

"Password" **:** "abc12"**,**

"Address" **:** **{**

"City" **:** "Kolkata"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**700126**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd88"**),**

"User\_ID" **:** "U002"**,**

"User\_Name" **:** "Isha"**,**

"Password" **:** "def34"**,**

"Address" **:** **{**

"City" **:** "Barasat"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**700124**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd89"**),**

"User\_ID" **:** "U003"**,**

"User\_Name" **:** "Shaan"**,**

"Password" **:** "ghi56"**,**

"Address" **:** **{**

"City" **:** "Siliguri"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**734001**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8a"**),**

"User\_ID" **:** "U004"**,**

"User\_Name" **:** "Rohini"**,**

"Password" **:** "jkl78"**,**

"Address" **:** **{**

"City" **:** "Malda"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**732101**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8b"**),**

"User\_ID" **:** "U005"**,**

"User\_Name" **:** "Ankit"**,**

"Password" **:** "mno90"**,**

"Address" **:** **{**

"City" **:** "Shantiniketan"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**731235**)**

**}**

**}**

**Q5: Display only the City and State using Slicing operation.**

**Ans:**

**db**.**userdetails**.**find({},{**Address**:** **{**$slice**:** **[**1**,**2**]}})**

**Output:**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd87"**),**

"User\_ID" **:** "U001"**,**

"User\_Name" **:** "Ram"**,**

"Password" **:** "abc12"**,**

"Address" **:** **{**

"City" **:** "Kolkata"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**700126**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd88"**),**

"User\_ID" **:** "U002"**,**

"User\_Name" **:** "Isha"**,**

"Password" **:** "def34"**,**

"Address" **:** **{**

"City" **:** "Barasat"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**700124**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd89"**),**

"User\_ID" **:** "U003"**,**

"User\_Name" **:** "Shaan"**,**

"Password" **:** "ghi56"**,**

"Address" **:** **{**

"City" **:** "Siliguri"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**734001**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8a"**),**

"User\_ID" **:** "U004"**,**

"User\_Name" **:** "Rohini"**,**

"Password" **:** "jkl78"**,**

"Address" **:** **{**

"City" **:** "Malda"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**732101**)**

**}**

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8b"**),**

"User\_ID" **:** "U005"**,**

"User\_Name" **:** "Ankit"**,**

"Password" **:** "mno90"**,**

"Address" **:** **{**

"City" **:** "Shantiniketan"**,**

"State" **:** "West Bengal"**,**

"Pincode" **:** NumberInt**(**731235**)**

**}**

**}**

**Q6: At last remove the address attribute from the collection by using Unset operation.**

**Ans:**

db.userdetails.updateMany**({},{**

$unset**:** **{** Address**:** "" **}**

**}**

**)**

**db**.**userdetails**.**find()**

**Output:**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd87"**),**

"User\_ID" **:** "U001"**,**

"User\_Name" **:** "Ram"**,**

"Password" **:** "abc12"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd88"**),**

"User\_ID" **:** "U002"**,**

"User\_Name" **:** "Isha"**,**

"Password" **:** "def34"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd89"**),**

"User\_ID" **:** "U003"**,**

"User\_Name" **:** "Shaan"**,**

"Password" **:** "ghi56"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8a"**),**

"User\_ID" **:** "U004"**,**

"User\_Name" **:** "Rohini"**,**

"Password" **:** "jkl78"

**}**

**{**

"\_id" **:** ObjectId**(**"65d9c004bff275e3c920fd8b"**),**

"User\_ID" **:** "U005"**,**

"User\_Name" **:** "Ankit"**,**

"Password" **:** "mno90"

**}**