



SQL + NoSQL Exam Sets

Roll No: 18 Smit Joshi | NoSQL | 20/09/2023



CREATING DATABASE

```
-- Creating Database
CREATE DATABASE SQLMid;
-- Selecting Database for Use
use SQLMid;
```

SET₁

Create the following tables (in MYSQL) and insert THREE records.

- 1. CUST_DETAILS (CustomerID, CustomerFirstName, CustomerCity, CustomerEmailID,Cust Gender)
- 2. PRODUCT_DETAILS (Product_ID, Product_Name, Product_Description, ProductQty, ProductCost)

```
-- Creating Table CUST_DETAILS
CREATE TABLE CUST DETAILS(
    CustomerID int primary key,
    CustomerFirstName varchar(50),
    CustomerCity varchar(20),
    CustomerEmailID varchar(50),
    CustomerGender varchar(6)
);
-- Creating Table PRODUCT DETAILS
CREATE TABLE PRODUCT_DETAILS(
    ProductID int primary key,
    Product Name varchar(100),
    ProductDescription varchar(255),
    ProductQty DECIMAL(2),
    ProductCost DECIMAL(6,2)
);
-- Adding Three Records In Each Table
INSERT INTO CUST DETAILS (
    CustomerID,
    CustomerFirstName,
    CustomerCity,
    CustomerEmailID,
    CustomerGender
) VALUES
```

PAGE 1 Smit Joshi

```
(1,'Smit Joshi','Deesa','smitjoshi814@gmail.com','Male'),
(2,'Vijay Joshi','Patan','vijayJoshi12@gmail.com','Male'),
(3,'Viahva Joshi','Ahmedabad','vishu4@gmail.com','Female');
INSERT INTO PRODUCT_DETAILS(
    ProductID,
    Product_Name,
    ProductDescription,
    ProductQty,
    ProductCost
) VALUES
(101, 'Parle-G', 'Ek Bar Khao Khate hi reh jao', 10, 4.8),
(102, 'LED', "It's Show Time", 10, 9999.99),
(103, 'LCD', 'Full HD Display', 10,8999.99);
-- 1. Add an additional field C_ CustomerLastName in CUST_DETAILS table.
ALTER TABLE CUST_DETAILS ADD C_CustomerLastName varchar(50);
-- 2. Change the cost of product to 1000 where Product_ID is 102.
UPDATE PRODUCT DETAILS SET ProductCost=1000 WHERE ProductID=102;
-- 3. . Display only those records from Product where the name of the product is LED or LCD.
(Do not use OR)
SELECT * FROM PRODUCT_DETAILS WHERE Product_Name IN('LED','LCD');
```

1 102 LED It's Show Time 10 1000.00	Product_Name varchar	\$
	LED It's Show Time 10 1000.00	
2 103 LCD Full HD Display 10 8999.99	LCD Full HD Display 10 8999.99	

```
//Databse For NoSQL Queries
Enterprise NoSQLMid> Use NoSQLMid;
```

➤ Create the Freshman Collection and insert THREE documents according to the instructions. (Freshma _Name, Address, Area_of_interest, Certification_course, Age, Score_Entrance)

```
Enterprise NoSQLMid> db.createCollection("Freshman");
Enterprise NoSQLMid> db.Freshman.insertMany([
        Freshma_Name:"Smit Joshi",
        Address: "Deesa",
        Area_of_intrest: "Parita",
        Certification_course: "Java Hero",
        Score_Entrance:80
    },
        Freshma_Name:"Tejasv Modi",
        Address: "Patan",
        Area_of_intrest:"Web Desisning",
        Certification_course:"Web Developing",
        Age:21,
        Score_Entrance:50
        Freshma_Name:"Nisha",
        Address: "Ranuj",
        Area of intrest: "Dancing",
        Certification_course: "Dancer's Things",
        Age:22,
        Score_Entrance:30
    }
]);
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("650a78069bddeec3c7d3d584"),
      '1': ObjectId("650a78069bddeec3c7d3d585"),
      '2': ObjectId("650a78069bddeec3c7d3d586")
```

Solve the following queries:

1. DISPLAY THE DETAILS OF THE FRESHMAN WHOSE ENTRANCE EXAM SCORE IS GREATER THAN 40.

```
Enterprise NoSQLMid> db.Freshman.find({ Score_Entrance: { $gt: 40 } });
    _id: ObjectId("650a78069bddeec3c7d3d584"),
   Freshma Name: 'Smit Joshi',
   Address: 'Deesa',
   Area of intrest: 'Parita',
   Certification_course: 'Java Hero',
   Age: 21,
   Score Entrance: 80
 },
    _id: ObjectId("650a78069bddeec3c7d3d585"),
   Freshma_Name: 'Tejasv Modi',
   Address: 'Patan',
   Area_of_intrest: 'Web Desisning',
   Certification_course: 'Web Developing',
   Age: 21,
   Score_Entrance: 50
```

2. CHANGE THE INTEREST AREA OF PARITA TO ANALYSIS.

```
Enterprise NoSQLMid> db.Freshman.updateMany({ Area_of_intrest: "Parita" }, { $set: {
    Area_of_intrest: "Analysis" } });
{
        acknowledged: true,
        insertedId: null,
        matchedCount: 1,
        modifiedCount: 1,
        upsertedCount: 0
}
```

3. DISPLAY DETAILS OF FRESHMAN WHO ARE NOT LIVING IN AHMEDABAD AND DELHI (USE NOR OPERATOR).

```
_id: ObjectId("650a78069bddeec3c7d3d584"),
 Freshma_Name: 'Smit Joshi',
 Address: 'Deesa',
 Area_of_intrest: 'Analysis',
 Certification_course: 'Java Hero',
 Age: 21,
 Score_Entrance: 80
},
  _id: ObjectId("650a78069bddeec3c7d3d585"),
  Freshma_Name: 'Tejasv Modi',
 Address: 'Patan',
 Area_of_intrest: 'Web Desisning',
 Certification_course: 'Web Developing',
 Age: 21,
 Score_Entrance: 50
},
  _id: ObjectId("650a78069bddeec3c7d3d586"),
 Freshma_Name: 'Nisha',
 Address: 'Ranuj',
 Area_of_intrest: 'Dancing',
 Certification_course: "Dancer's Things",
 Age: 22,
 Score_Entrance: 30
```

SET₂

Create the following tables (in MYSQL) and insert THREE records.

- 1. Publisher_DETAILS (Publisher_ID, Publisher_Name, Publisher_City)
- 2. ORDER (OrderNo, Order_Date, OrderAmount)

```
-- CREATING TABLE Publisher DETAILS
CREATE TABLE Publisher_DETAILS(
Publisher_ID int primary key,
Publisher_Name varchar(50),
Publisher_City varchar(30)
);
-- CREATING TABLE ORDERS
CREATE TABLE ORDERS(
OrderNo int Primary Key,
Order_Date Date,
OrderAmount DECIMAL(6,2)
);
-- INSERTING Three Records In Each ONE
INSERT INTO Publisher_DETAILS(
Publisher_ID,
Publisher_Name,
Publisher_City
) VALUES
(1,'Smit Joshi','Ahmedabad'),
(2,'Vijay Joshi','Mumbai'),
(3,'Jinal Patel','Surat');
INSERT INTO ORDERS(
OrderNo ,
Order_Date ,
OrderAmount
) VALUES
(1, '2003-07-29',8999.99),
(2, '2003-08-02',899.99),
(3, '2003-09-09',4599.99);
```

```
-- 1. Add an additional field Publisher Email in Publisher DETAILS table.
ALTER TABLE Publisher DETAILS ADD Publisher Email varchar(40);
-- 2. Change the OrderAmount to 5000 where OrderNo is 3
UPDATE ORDERS SET OrderAmount=5000 WHERE OrderNo=3;
-- 3. Display only those records from Publisher where the Publisher city is Ahmedabad or
SELECT * FROM Publisher_DETAILS WHERE Publisher_city IN ('Ahmedabad','Mumbai');
             Publisher_ID _ Publisher_Name _
                                                Publisher_City
                                                                   Publisher Email
                                varchar
                                                                      varchar
                                                   varchar
                 int
                             Smit Joshi
                                               Ahmedabad
                                                                   (NULL)
                             Vijay Joshi
                                               Mumbai
                                                                   (NULL)
```

```
//Databse For NoSQL Queries
Enterprise NoSQLMid> Use NoSQLMid;
```

> Create the Employee Collection and insert THREE documents according to the instructions (Name, Address, Experience, Department, Age, Rating)

```
Name: "Ram",
        Address: "Ayodhya",
        Experience: "1 Year",
        Department: "Sales",
        Age: 19,
        Rating: 9
        Name: "Hanuman",
        Address: "Ahmedabad",
        Experience: "2 years",
        Department: "Sales",
        Age: 22,
        Rating: 5
]);
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("650a834c9bddeec3c7d3d58d"),
      '1': ObjectId("650a834c9bddeec3c7d3d58e"),
      '2': ObjectId("650a834c9bddeec3c7d3d58f")
```

Solve the following queries:

1. DISPLAY THE DETAILS OF THE EMPLOYEE WHOSE RATING IS GREATER THAN 5.

2. CHANGE THE DEPARTMENT OF RAM TO PURCHASE.

```
Enterprise NoSQLMid> db.Employee.updateOne({ Name: "Ram" }, { $set: { Department: "Purchase" } });
{ acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

3. DISPLAY DETAILS OF EMPLOYEE WHO ARE NOT LIVING IN AHMEDABAD AND SURAT (USE NOR OPERATOR).

SET₃

Create the following tables (in MYSQL) and insert THREE records.

- 1. PATIENT (Patient_ID, Patient_Name, Patient_Age, Charges, Patient_Gender)
- 2. DOCTOR_DETAILS(Doct_ID, DoctFName, salary, D_Age,Experience)

```
-- Creating table PATIENT
CREATE TABLE PATIENT(
      Patient_ID int primary Key, Patient_Name varchar(50),
      Patient_Age DECIMAL(2), Charges DECIMAL(6,2),
      Patient_Gender VARCHAR(6) );
-- Creating table DOCTOR_DETAILS
CREATE TABLE DOCTOR_DETAILS(
      Doct_ID int primary key, DoctFName VARCHAR(50), salary DECIMAL(7,2),
      D_Age DECIMAL(2), Experience DECIMAL(2) );
-- Inserting Three Records In Each ONE
INSERT INTO PATIENT(
      Patient_ID,
      Patient Name,
      Patient_Age,
      Charges,
      Patient_Gender
)VALUES
(1, 'Vikas',28,999.99,'Male'),
(2, 'Sakshi', 30, 499.99, 'Female'),
(3, 'Sarthak',17,899.99, 'Male');
INSERT INTO DOCTOR_DETAILS(
      Doct_ID,
      DoctFName,
      salary,
      D_Age,
      Experience
)VALUES
(1, 'Drashti', 20000, 29, 2),
(2, 'Bhavik', 10000, 39, 10),
(3,'Vijay',20000,48,18);
-- 1. Add an additional field DoctLName in DOCTOR DETAILS table.
ALTER TABLE DOCTOR_DETAILS ADD DocLName varchar(20);
-- 2. Change the Charges to 2000 where Patient ID is 3.
UPDATE PATIENT SET Charges=2000 WHERE Patient_ID=3;
```

```
-- 3. Display only those records from DOCTOR DETAILS where the salary is 10000 or 20000. (Do
not use OR)
SELECT * FROM DOCTOR DETAILS WHERE salary IN(10000,20000);
                     Doct ID
                                                          ≜ Experience   DocLName   
                                                  D Age
                                      salary
                                                newdecima
                                                             newdecimal
                                    newdecima `
                                                                            varchar
               int
                                     20000.00
                         Drashti
                                                  29
                                                                              (NULL)
            1
            2
                         Bhavik
                                     10000.00
                                                  39
                                                              10
                                                                              (NULL)
            3
                         Vijay
                                     20000.00
                                                  48
                                                              18
                                                                              (NULL)
```

```
//Databse For NoSQL Queries
Enterprise NoSQLMid> Use NoSQLMid;
```

> Create the Seller Collection and insert THREE documents according to the instructions. (Name, Address, Products_Supplied, T_C, Age, Type, Total_Order, Pending_order)

```
Enterprise NoSQLMid> db.createCollection("Selller");

Enterprise NoSQLMid> db.Seller.insertMany([{
         Name: "Smit",
         Address: "Ahmedabad",
         Products_Supplied: ["Brush", "Colgate", "Buiscuits"],
         T_C: true,
         Age: 28,
         Type: "x type",
         Total_Order: 1200,
         Pending_order: 100
    },
```

```
Name: "Switi",
        Address: "Bhavnagar",
        Products_Supplied: ["Chocolets", "Milk", "Buiscuits"],
        T_C: truer,
        Age: 21,
        Type: "y type",
        Total_Order: 100,
        Pending_order: 50
        Name: "Tejasv",
        Address: "Surat",
        Products_Supplied: ["Cosmatics", "Hurbal", "Shempoo"],
        T_C: true,
        Age: 25,
        Type: "z type",
        Total_Order: 200,
        Pending_order: 10
]);
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("650b09b2a6ac83287629014d"),
      '1': ObjectId("650b09b2a6ac83287629014e"),
      '2': ObjectId("650b09b2a6ac83287629014f")
```

Solve the following queries:

1. DISPLAY THE DETAILS OF THE SELLER WHOSE AGE IS GREATER THAN 25.

2. CHANGE THE T_C OF SUMIT TO "ALLOW_CREDIT".

3. DISPLAY DETAILS OF SELLER WHO ARE NOT LIVING IN AHMEDABAD AND BHAVNAGAR (USE NOR OPERATOR).

SET₄

Create the following tables (in MYSQL) and insert THREE records.

- 1. ARTIST (A_ID,A_NAME,A_AGE,A_EXPERIENCE, A_Salary,A_gender,email)
- 2. Painting (Painting_ID, PaintingName, Category, Price)

```
-- CREATING ARTIST TABLE
CREATE TABLE ARTIST(
    A ID INT PRIMARY KEY,
    A_NAME VARCHAR(50),
    A_AGE VARCHAR(50),
    A_EXPERIENCE DECIMAL(2),
    A_Salary DECIMAL(7,2),
    A gender VARCHAR(6),
    email VARCHAR(50)
);
-- CREATING PAINTING TABLE
CREATE TABLE Painting(
    Painting_ID int PRIMARY key,
    PaintingName VARCHAR(50),
    Category VARCHAR(30),
    Price DECIMAL(7,2)
);
-- INSERTING THREE RECORDS IN ECH ONE
INSERT INTO ARTIST(
      A_ID,
      A_NAME,
      A_AGE,
      A_EXPERIENCE,
      A_Salary,
      A_gender,
      email
)VALUES
(1, 'Smit Joshi', 21, 2, 70000, 'Male', 'smitjoshi@gmail.com'),
(2, 'Vishva Joshi', 20,1,30000, 'Female', 'vaishujoshi@gmail.com'),
(3,'Vijay Joshi',27,4,90000,'Male','joshivijay34@gmail.com');
INSERT INTO Painting(
Painting_ID, PaintingName,
Category, Price ) VALUES
(101, 'Radha Shyam', 'Abstract art', 90000),
(102, 'Wild Life', 'Oil painting', 50000),
(103, 'Peace', 'Spray Painting', 40000);
```

```
-- 1. Add an additional field City in ARTIST table.
ALTER TABLE ARTIST ADD City varchar(20);
-- 2. Change the Category to Oil painting where Painting_ID is 101.
UPDATE Painting SET Category="Oil Painting" WHERE Painting ID=101;
-- 3. Display only those records from Painting where the Category is Oil painting or Abstract
art.(Do not use OR)
SELECT * FROM Painting WHERE Category IN("Oil Painting","Abstract art");
              Category
                                                                      Price
                                                    varchar
                                                                   newdecima
                               Radha Shyam
              101
                                                  Oil Painting
                                                                     90000.00
                               Wild Life
                                                  Oil painting
              102
                                                                     50000.00
```

```
//Databse For NoSQL Queries
Enterprise NoSQLMid> Use NoSQLMid;
```

> Create the Dealer Collection and insert THREE documents according to the instructions. (Name, Address, Product_name, T_C, Age, Amount)

```
Enterprise NoSQLMid> db.createCollection("Dealer");

Enterprise NoSQLMid> db.Dealer.insertMany([{
        Name: "Shyam",
        Address: "Deesa",
        Product_name: "Dairy Milk",
        T_C: true,
        Age: 21,
        Amount: 5000
    },
```

```
Name: "Smit Joshi",
        Address: "Rajkot",
        Product_name: "Parle-G",
        T_C: true,
        Age: 21,
        Amount: 15500
    },
        Name: "Drashti Joshi",
        Address: "Ahmedabad",
        Product_name: "Bread",
        T_C: true,
        Age: 20,
        Amount: 2000
]);
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("650b1a926bd320393a123ff0"),
      '1': ObjectId("650b1a926bd320393a123ff1"),
      '2': ObjectId("650b1a926bd320393a123ff2")
```

Solve the following queries:

1. DISPLAY THE DETAILS OF THE DEALER WHOSE AMOUNT IS GREATER THAN 15000.

2. CHANGE THE ADRESS OF DEALER NAME SHYAM TO PUNE.

```
Enterprise NoSQLMid> db.Dealer.updateOne({ Name: "Shyam" }, { $set: { Address: "Pune" } });
{
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    upsertedCount: 0
}
```

3. DISPLAY DETAILS OF DEALER WHO ARE NOT LIVING IN RAJKOT AND AHMEDABAD (USE NOR OPERATOR).

SET 5

Create the following tables (in MYSQL) and insert THREE records.

- 1. TRANSACTION_DETAILS (TransactionID, AccountNo,TransactionType, TransactionAmount)
- 2. ACCOUNT_MASTER (AccountNo, AccountHolderName, A_City, AccountType, AccountBalance)

```
-- CREATING TABLE ACCOUNT MASTER
CREATE TABLE ACCOUNT_MASTER(
    AccountNo int primary KEY,
    AccountHoldername VARCHAR(50),
    A_City VARCHAR(30),
    AccountType VARCHAR(10),
    AccountBalance DECIMAL(7,2)
);
-- CREATING TABLE TRANSACTION DETAILS
CREATE TABLE TRANSACTION DETAILS(
    TransactionID int PRIMARY KEY,
    AccountNo int,
    TransactionType VARCHAR(10),
    TransactionAmount DECIMAL(6,4),
    Foreign Key (AccountNo) REFERENCES ACCOUNT MASTER(AccountNo)
);
-- INSERTING THREE RECORDS IN EACH TABLE
INSERT INTO ACCOUNT MASTER(
    AccountNo,
    AccountHoldername,
    A_City,
    AccountType,
    AccountBalance
)VALUES
(101, "Rakesh", "Deesa", "saving", 99999.99),
(102, "Suresh", "Ahmedabad", "current", 7999.99),
(103, "Smit Joshi", "Deesa", "saving", 28999.99);
INSERT INTO TRANSACTION DETAILS(
    TransactionID,
    AccountNo,
    TransactionType,
    TransactionAmount
) VALUES (1,101,"UPI",3000),(2,102,"Cash",10000),(3,103,"Credit Card",6000);
-- 1. Add an additional field TransactionDate in TRANSACTION DETAILS table.
ALTER TABLE TRANSACTION DETAILS ADD TransactionDate DATE;
```

```
-- 2. Change the status of AccountType to "Current" where AccountNo is 101.
UPDATE ACCOUNT MASTER SET AccountType="current" WHERE AccountNo=101;
-- 3. Display only those records from ACCOUNT_MASTER where the name is "Rakesh" or "Suresh".
(Do not use OR)
SELECT * FROM ACCOUNT_MASTER WHERE AccountHolderName IN ("Rakesh", "Suresh");
           AccountNc 📥 AccountHoldername 📥
                                                          AccountType 📥
                                                A_City
                                                                          AccountBalance
                              varchar
                                                varchar
                                                             varchar
                                                                            newdecimal
             101
                         Rakesh
                                                Deesa
                                                                          99999.99
                                                            current
             102
                         Suresh
                                                Ahmedabad current
                                                                          7999.99
```

```
//Databse For NoSQL Queries
Enterprise NoSQLMid> Use NoSQLMid;
```

➤ Create the Associate Collection and insert THREE documents according to the instructions. (Name, Address, Area_of_Expertise, Certification_course, Age, Score_Entrance)

```
Enterprise NoSQLMid> db.createCollection("Associate");

Enterprise NoSQLMid> db.Associate.insertMany([{
        Name: "Smita",
        Address: "Surat",
        Area_of_Expertise: "Wed Development",
        Certification_course: "Web Dev+",
        Age: 21,
        Score_Entrance: 80
    },
```

```
Name: "Switi",
        Address: "Surat",
        Area_of_Expertise: "Java Developer",
        Certification_course: "Java Zero To Hero",
        Age: 32,
        Score_Entrance: 89
    },
        Name: "Vijay",
        Address: "Rajkot",
        Area_of_Expertise: "Accounting",
        Certification_course: "Accounting Masters",
        Age: 30,
        Score_Entrance: 60
]);
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("650b246b6bd320393a123ff8"),
      '1': ObjectId("650b246b6bd320393a123ff9"),
      '2': ObjectId("650b246b6bd320393a123ffa")
```

1. DISPLAY THE DETAILS OF ASSOCIATE WHOSE AGE IS LESS THAN 30.

2. CHANGE THE ADDRESS OF SMITA TO AHMEDABAD.

```
Enterprise NoSQLMid> db.Associate.updateOne({ Name: "Smita" }, { $set: { Address: "Ahmedabad" } });
{
   acknowledged: true,
   insertedId: null,
   matchedCount: 1,
   modifiedCount: 1,
   upsertedCount: 0
}
```

3. DISPLAY DETAILS OF ASSOCIATE WHO ARE NOT LIVING IN RAJKOT AND SURAT (USE NOR OPERATOR)

Finished