

**SIT103 DATABASE FUNDAMENTALS**

**MINI PROJECT PART 2**

**SUBMITTED BY – JASVEENA-224001588**

1. Write SQL statements to create all tables in the final normalized ERD in Task 4.2C.

CUSTOMER: CREATE TABLE Customer (

```
Customer_ID INT AUTO_INCREMENT PRIMARY KEY,  
Name VARCHAR(100) NOT NULL,  
Age INT NOT NULL,  
Email VARCHAR(100) UNIQUE NOT NULL,  
Phone_Number VARCHAR(15) NOT NULL  
);
```

DRIVER: CREATE TABLE Driver (

```
Driver_ID INT AUTO_INCREMENT PRIMARY KEY,  
Name VARCHAR(100) NOT NULL,  
Email VARCHAR(100) UNIQUE NOT NULL,  
Phone_Number VARCHAR(15) NOT NULL,  
Car_Number VARCHAR(20) NOT NULL  
);
```

BOOKING : CREATE TABLE Booking (

```
Booking_ID INT AUTO_INCREMENT PRIMARY KEY,  
Booking_Date DATE NOT NULL,  
Current_Location VARCHAR(255) NOT NULL,  
Destination_Location VARCHAR(255) NOT NULL,  
Customer_ID INT,  
Driver_ID INT,  
FOREIGN KEY (Customer_ID) REFERENCES Customer(Customer_ID),  
FOREIGN KEY (Driver_ID) REFERENCES Driver(Driver_ID)
```

);

PAYMENT : CREATE TABLE Payment (

Payment\_ID INT AUTO\_INCREMENT PRIMARY KEY,

Payment\_Date DATE NOT NULL,

Amount DECIMAL(10, 2) NOT NULL,

Booking\_ID INT,

FOREIGN KEY (Booking\_ID) REFERENCES Booking(Booking\_ID)

);

REVIEW : CREATE TABLE Review (

Review\_ID INT AUTO\_INCREMENT PRIMARY KEY,

Review\_Date DATE NOT NULL,

Description TEXT,

Driver\_ID INT,

Booking\_ID INT,

FOREIGN KEY (Driver\_ID) REFERENCES Driver(Driver\_ID),

FOREIGN KEY (Booking\_ID) REFERENCES Booking(Booking\_ID)

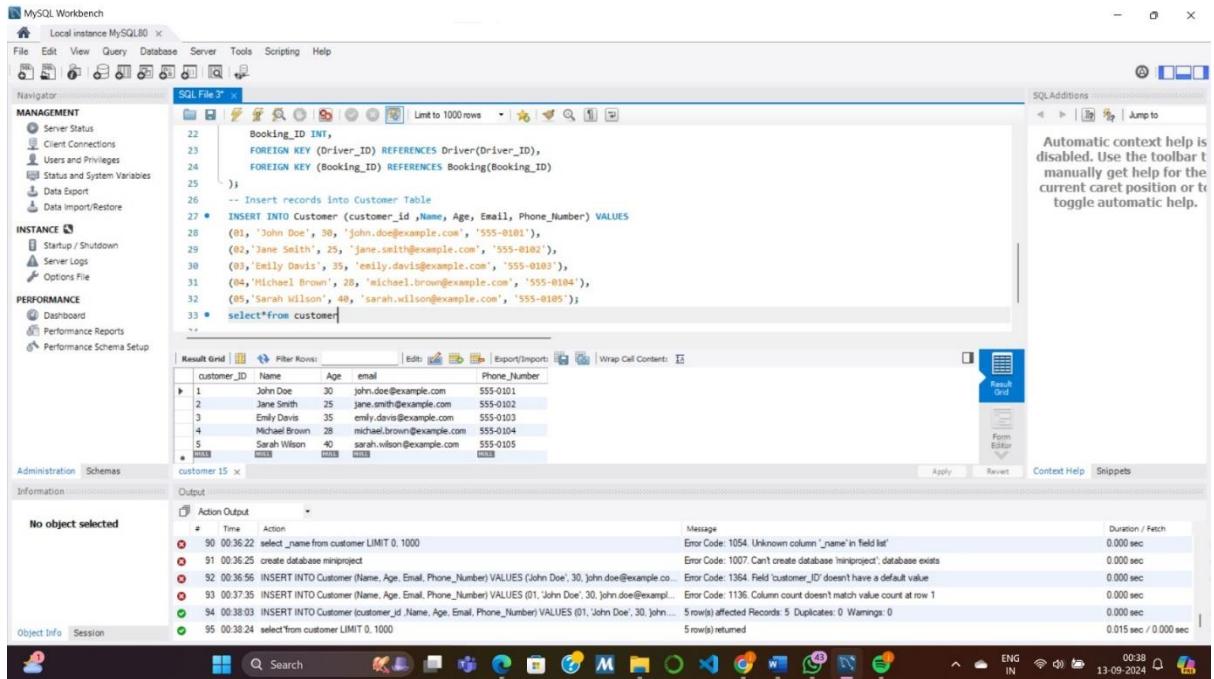
);

```
MySQL Workbench - Local instance MySQL80 x
File Edit View Query Database Server Tools Scripting Help
SQL File 3... Limit to 1000 rows
MANAGEMENT
  Server Status
  Client Connections
  Users and Privileges
  Status and System Variables
  Data Export
  Data Import/Restore
INSTANCE
  Startup / Shutdown
  Server Logs
  Options File
PERFORMANCE
  Dashboard
  Performance Reports
  Performance Schema Setup
Administration Schemas
Information
No object selected
Object Info Session
Action Output
# Time Action Message Duration / Fetch
1 30 00:04:44 show tables 0 row(s) returned 0.000 sec / 0.000 sec
2 31 00:04:44 CREATE TABLE Customer (customer_id INT PRIMARY KEY, Name VARCHAR(100) NOT NULL, Age INT, email VARCHAR(100) UNIQUE NOT NULL, Phone_Number VARCHAR(100) UNIQUE NOT NULL, Address VARCHAR(255) NOT NULL, City VARCHAR(50) NOT NULL, State VARCHAR(50) NOT NULL, Zip INT NOT NULL)
3 32 00:07:40 CREATE TABLE Driver (Driver_ID INT AUTO_INCREMENT PRIMARY KEY, Name VARCHAR(100) NOT NULL, Email VARCHAR(100) UNIQUE NOT NULL, Phone_Number VARCHAR(100) UNIQUE NOT NULL, Address VARCHAR(255) NOT NULL, City VARCHAR(50) NOT NULL, State VARCHAR(50) NOT NULL, Zip INT NOT NULL)
4 33 00:10:16 CREATE TABLE Booking (Booking_ID INT AUTO_INCREMENT PRIMARY KEY, Booking_Date DATE NOT NULL, Current_Location VARCHAR(255) NOT NULL, Destination VARCHAR(255) NOT NULL, Driver_ID INT, Payment_ID INT)
5 34 00:10:51 CREATE TABLE Payment (Payment_ID INT AUTO_INCREMENT PRIMARY KEY, Payment_Date DATETIME NOT NULL, Amount DECIMAL(10, 2) NOT NULL, Booking_ID INT, FOREIGN KEY (Booking_ID) REFERENCES Booking(Booking_ID))
6 35 00:11:34 CREATE TABLE Review (Review_ID INT AUTO_INCREMENT PRIMARY KEY, Review_Date DATE NOT NULL, Description TEXT NOT NULL, Driver_ID INT, Booking_ID INT, FOREIGN KEY (Driver_ID) REFERENCES Driver(Driver_ID), FOREIGN KEY (Booking_ID) REFERENCES Booking(Booking_ID))
```

2. Insert at least FIVE records in each table using SQL.

## CUSTOMER TABLE : INSERT INTO Customer (Name, Age, Email, Phone\_Number) VALUES

```
('John Doe', 30, 'john.doe@example.com', '555-0101'),
('Jane Smith', 25, 'jane.smith@example.com', '555-0102'),
('Emily Davis', 35, 'emily.davis@example.com', '555-0103'),
('Michael Brown', 28, 'michael.brown@example.com', '555-0104'),
('Sarah Wilson', 40, 'sarah.wilson@example.com', '555-0105');
```



The screenshot shows the MySQL Workbench interface with the following details:

- File Bar:** File, Edit, View, Query, Database, Server, Tools, Scripting, Help.
- SQL Editor:** SQL tab, File 3\*, contains the provided SQL code for inserting data into the CUSTOMER table.
- Result Grid:** Shows the inserted data with columns: customer\_ID, Name, Age, email, and Phone\_Number. The data is as follows:

customer_ID	Name	Age	email	Phone_Number
1	John Doe	30	john.doe@example.com	555-0101
2	Jane Smith	25	jane.smith@example.com	555-0102
3	Emily Davis	35	emily.davis@example.com	555-0103
4	Michael Brown	28	michael.brown@example.com	555-0104
5	Sarah Wilson	40	sarah.wilson@example.com	555-0105

- Output Tab:** Action Output section shows the execution log with the following entries:

Time	Action	Message	Duration / Fetch
90 00:36:22	select _name from customer LIMIT 0, 1000	Error Code: 1054 Unknown column '_name' in field list'	0.000 sec
91 00:36:25	create database miniproject	Error Code: 1007 Can't create database 'miniproject'; database exists	0.000 sec
92 00:36:56	INSERT INTO Customer (Name, Age, Email, Phone_Number) VALUES ('John Doe', 30, 'john.doe@example.com', '555-0101')	Error Code: 1364 Field 'customer_ID' doesn't have a default value	0.000 sec
93 00:37:35	INSERT INTO Customer (Name, Age, Email, Phone_Number) VALUES ('John Doe', 30, 'john.doe@example.com', '555-0101')	Error Code: 1136 Column count doesn't match value count at row 1	0.000 sec
94 00:38:03	INSERT INTO Customer (customer_ID, Name, Age, Email, Phone_Number) VALUES (01, 'John Doe', 30, 'john.doe@example.com', '555-0101')	5 row(s) affected Records: 5 Warnings: 0	0.000 sec
95 00:38:24	select * from customer LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec

## DRIVER TABLE : INSERT INTO Driver (Name, Email, Phone\_Number, Car\_Number) VALUES

```
('Alice Johnson', 'alice.johnson@example.com', '555-0201', 'CAR123'),
('Bob Lee', 'bob.lee@example.com', '555-0202', 'CAR124'),
('Charlie Brown', 'charlie.brown@example.com', '555-0203', 'CAR125'),
('David Wilson', 'david.wilson@example.com', '555-0204', 'CAR126'),
('Ella Davis', 'ella.davis@example.com', '555-0205', 'CAR127');
```

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

MANAGEMENT

- Server Status
- Client Connection
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

SQL File 3\*

```

31  ('04, 'Michael Brown', 28, 'michael.brown@example.com', '555-0104'),
32  ('05, 'Sarah Wilson', 40, 'sarah.wilson@example.com', '555-0105');
33
34 * use miniproject;
35
36 * INSERT INTO Driver (driver_id, Name, Email, Phone_Number, Car_Number) VALUES
37  ('01, 'Alice Johnson', 'alice.johnson@example.com', '555-0201', 'CAR123'),
38  ('02, 'Bob Lee', 'bob.lee@example.com', '555-0202', 'CAR124'),
39  ('03, 'Charlie Brown', 'charlie.brown@example.com', '555-0203', 'CAR125'),
40  ('04, 'David Wilson', 'david.wilson@example.com', '555-0204', 'CAR126'),
41  ('05, 'Ella Davis', 'ella.davis@example.com', '555-0205', 'CAR127');
42 * select * from driver
43

```

Result Grid

Driver_ID	Name	Email	Phone_Number	Car_Number
1	Alice Johnson	alice.johnson@example.com	555-0201	CAR123
2	Bob Lee	bob.lee@example.com	555-0202	CAR124
3	Charlie Brown	charlie.brown@example.com	555-0203	CAR125
4	David Wilson	david.wilson@example.com	555-0204	CAR126
5	Ella Davis	ella.davis@example.com	555-0205	CAR127

driver 16 x

Action Output

#	Time	Action	Message	Duration / Fetch
94	00:38:03	INSERT INTO Customer (customer_id, Name, Age, Email, Phone_Number) VALUES ('01, John Doe', 30, John...)	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.000 sec
95	00:38:24	select from customer LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
96	00:45:10	INSERT INTO Driver (Name, Email, Phone_Number, Car_Number) VALUES ('01, 'Alice Johnson', 'alice.johnson...', 'CAR123')	Error Code: 1136. Column count doesn't match value count at row 1	0.000 sec
97	00:45:29	INSERT INTO Driver (driver_id, Name, Email, Phone_Number, Car_Number) VALUES ('01, 'Alice Johnson', 'alic...', 'CAR123')	Error Code: 1054. Unknown column '_Name' in field list'	0.000 sec
98	00:45:40	INSERT INTO Driver (driver_id, Name, Email, Phone_Number, Car_Number) VALUES ('01, 'Alice Johnson', 'alic...', 'CAR123')	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.015 sec
99	00:45:55	select * from driver LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Information

Output

ENG IN 80:45 13-09-2024

BOOKING TABLE : INSERT INTO Booking (Booking\_Date,  
Current\_Location, Destination\_Location, Customer\_ID, Driver\_ID)  
VALUES

```

('2024-09-01', '123 Main St', '456 Elm St', 1, 1),
('2024-09-02', '789 Maple St', '101 Pine St', 2, 2),
('2024-09-03', '102 Oak St', '203 Birch St', 3, 3),
('2024-09-04', '204 Cedar St', '305 Walnut St', 4, 4),
('2024-09-05', '305 Spruce St', '406 Pine St', 5, 5);

```

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

MANAGEMENT

- Server Status
- Client Connection
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

SQL File 3\*

```

39  ('03, 'Charlie Brown', 'charlie.brown@example.com', '555-0203', 'CAR125'),
40  ('04, 'David Wilson', 'david.wilson@example.com', '555-0204', 'CAR126'),
41  ('05, 'Ella Davis', 'ella.davis@example.com', '555-0205', 'CAR127');
42
43 * INSERT INTO Booking (Booking_Date, Current_Location, Destination_Location, Customer_ID, Driver_ID) VALUES
44  ('2024-09-01', '123 Main St', '456 Elm St', 1, 1),
45  ('2024-09-02', '789 Maple St', '101 Pine St', 2, 2),
46  ('2024-09-03', '102 Oak St', '203 Birch St', 3, 3),
47  ('2024-09-04', '204 Cedar St', '305 Walnut St', 4, 4),
48  ('2024-09-05', '305 Spruce St', '406 Pine St', 5, 5);
49 * select * from booking
50

```

Result Grid

Booking_ID	Booking_Date	Current_Location	Destination_Location	Customer_ID	Driver_ID
1	2024-09-01	123 Main St	456 Elm St	1	1
2	2024-09-02	789 Maple St	101 Pine St	2	2
3	2024-09-03	102 Oak St	203 Birch St	3	3
4	2024-09-04	204 Cedar St	305 Walnut St	4	4
5	2024-09-05	305 Spruce St	406 Pine St	5	5

booking 17 x

Action Output

#	Time	Action	Message	Duration / Fetch
96	00:45:10	INSERT INTO Driver (Name, Email, Phone_Number, Car_Number) VALUES ('01, 'Alice Johnson', 'alice.johnson...', 'CAR123')	Error Code: 1136. Column count doesn't match value count at row 1	0.000 sec
97	00:45:29	INSERT INTO Driver (driver_id, Name, Email, Phone_Number, Car_Number) VALUES ('01, 'Alice Johnson', 'alic...', 'CAR123')	Error Code: 1054. Unknown column '_Name' in field list'	0.000 sec
98	00:45:40	INSERT INTO Driver (driver_id, Name, Email, Phone_Number, Car_Number) VALUES ('01, 'Alice Johnson', 'alic...', 'CAR123')	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.015 sec
99	00:45:55	select * from driver LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
100	00:46:43	INSERT INTO Booking (Booking_Date, Current_Location, Destination_Location, Customer_ID, Driver_ID) VALUES ('2024-09-01', '123 Main St', '456 Elm St', 1, 1)	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.016 sec
101	00:47:10	select from booking LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Information

Output

ENG IN 80:47 13-09-2024

PAYMENT TABLE : INSERT INTO Payment (Payment\_Date, Amount, Booking\_ID) VALUES

```
('2024-09-01', 20.00, 1),
('2024-09-02', 25.00, 2),
('2024-09-03', 30.00, 3),
('2024-09-04', 15.00, 4),
('2024-09-05', 40.00, 5);
```

The screenshot shows the MySQL Workbench interface. The SQL Editor pane contains the following code:

```

46 ('2024-09-01', '789 Maple St', '101 Pine St', 2, 2),
47 ('2024-09-02', '102 Oak St', '203 Birch St', 3, 3),
48 ('2024-09-03', '204 Cedar St', '305 Walnut St', 4, 4),
49 ('2024-09-04', '306 Spruce St', '406 Pine St', 5, 5);
50
51 * INSERT INTO Payment (Payment_Date, Amount, Booking_ID) VALUES
52 ('2024-09-01', 20.00, 1),
53 ('2024-09-02', 25.00, 2),
54 ('2024-09-03', 30.00, 3),
55 ('2024-09-04', 15.00, 4),
56 ('2024-09-05', 40.00, 5);
57 * select *from payment
  
```

The Results Grid pane displays the following data:

Payment_ID	Payment_Date	Amount	Booking_ID
1	2024-09-01	20.00	1
2	2024-09-02	25.00	2
3	2024-09-03	30.00	3
4	2024-09-04	15.00	4
5	2024-09-05	40.00	5

The Output pane shows the execution log:

- # 99 00:45:55 select \*from driver LIMIT 0, 1000 Message 5 row(s) returned Duration / Fetch 0.000 sec / 0.000 sec
- # 100 00:46:43 INSERT INTO Booking (Booking\_Date, Current\_Location, Destination\_Location, Customer\_ID, Driver\_ID) VALUES Message 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0 Duration / Fetch 0.016 sec / 0.000 sec
- # 101 00:47:10 select from booking LIMIT 0, 1000 Message 5 row(s) returned Duration / Fetch 0.000 sec / 0.000 sec
- # 102 00:48:15 select \*from payment LIMIT 0, 1000 Message 0 row(s) returned Duration / Fetch 0.016 sec / 0.000 sec
- # 103 00:48:25 INSERT INTO Payment (Payment\_Date, Amount, Booking\_ID) VALUES ('2024-09-01', 20.00, 1), ('2024-09-02', 25.00, 2), ('2024-09-03', 30.00, 3), ('2024-09-04', 15.00, 4), ('2024-09-05', 40.00, 5) Message 5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0 Duration / Fetch 0.016 sec / 0.000 sec
- # 104 00:48:35 select \*from payment LIMIT 0, 1000 Message 5 row(s) returned Duration / Fetch 0.000 sec / 0.000 sec

REVIEW TABLE : INSERT INTO Review (Review\_Date, Description, Driver\_ID, Booking\_ID) VALUES

```
('2024-09-02', 'Great service!', 1, 1),
('2024-09-03', 'Very punctual.', 2, 2),
('2024-09-04', 'Friendly driver.', 3, 3),
('2024-09-05', 'Comfortable ride.', 4, 4),
('2024-09-06', 'Will use again.', 5, 5);
```

```

MySQL Workbench
Local instance MySQL80 x
File Edit View Query Database Server Tools Scripting Help
Navigator
MANAGEMENT
    Server Status
    Client Connections
    Users and Privileges
    Status and System Variables
    Data Export
    Data Import/Restore
INSTANCE
    Startup / Shutdown
    Server Logs
    Options File
PERFORMANCE
    Dashboard
    Performance Reports
    Performance Schema Setup
SQL File 3* >
53 ('2024-09-02', 25.00, 2),
54 ('2024-09-03', 30.00, 3),
55 ('2024-09-04', 15.00, 4),
56 ('2024-09-05', 40.00, 5);
57
58 • INSERT INTO Review (Review_Date, Description, Driver_ID, Booking_ID) VALUES
('2024-09-02', 'Great service!', 1, 1),
('2024-09-03', 'Very punctual.', 2, 2),
('2024-09-04', 'Friendly driver.', 3, 3),
('2024-09-05', 'Comfortable ride.', 4, 4),
('2024-09-06', 'Will use again.', 5, 5);
64 • select*from review

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

Review_ID	Review_Date	Description	Driver_ID	Booking_ID
1	2024-09-02	Great service!	1	1
2	2024-09-03	Punctual.	2	2
3	2024-09-04	Friendly driver.	3	3
4	2024-09-05	Comfortable ride.	4	4
5	2024-09-06	Will use again.	5	5

Administration Schemas Output

Action Output

#	Time	Action	Message	Duration / Fetch
101	00:47:10	select*from booking LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
102	00:48:15	select*from payment LIMIT 0, 1000	0 row(s) returned	0.016 sec / 0.000 sec
103	00:48:25	INSERT INTO Payment (Payment_Date, Amount, Booking_ID) VALUES (2024-09-01, 20.00, 1), (2024-09-02, 20.00, 2), (2024-09-03, 20.00, 3), (2024-09-04, 20.00, 4), (2024-09-05, 20.00, 5)	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.016 sec
104	00:48:35	select*from payment LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
105	00:49:20	INSERT INTO Review (Review_Date, Description, Driver_ID, Booking_ID) VALUES ('2024-09-02', 'Great service!', 1, 1), ('2024-09-03', 'Very punctual.', 2, 2), ('2024-09-04', 'Friendly driver.', 3, 3), ('2024-09-05', 'Comfortable ride.', 4, 4), ('2024-09-06', 'Will use again.', 5, 5)	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.016 sec
106	00:49:33	select*from review LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec

No object selected

Object Info Session

3. Write and run an SQL statement to add one additional column (attribute) in any one of the existing tables

with a default value.

Alter table Customer ADD COLUMN `Preferred\_Payment\_method` varchar(20)  
default "Cash";

```

MySQL Workbench
Local instance MySQL80 x
File Edit View Query Database Server Tools Scripting Help
Navigator
MANAGEMENT
    Server Status
    Client Connections
    Users and Privileges
    Status and System Variables
    Data Export
    Data Import/Restore
INSTANCE
    Startup / Shutdown
    Server Logs
    Options File
PERFORMANCE
    Dashboard
    Performance Reports
    Performance Schema Setup
SQL File 2* >
58 • INSERT INTO Review (Review_Date, Description, Driver_ID, Booking_ID) VALUES
('2024-09-02', 'Great service!', 1, 1),
('2024-09-03', 'Very punctual.', 2, 2),
('2024-09-04', 'Friendly driver.', 3, 3),
('2024-09-05', 'Comfortable ride.', 4, 4),
('2024-09-06', 'Will use again.', 5, 5);
67 • Alter table Customer ADD COLUMN `Preferred_Payment_method` varchar(20) default "Cash";
68
69 • select* from customer

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

customer_ID	Name	Age	email	Phone_Number	Status	Preferred_Payment_Method
1	Jane Doe	30	jane.doe@example.com	555-0101	Active	Cash
2	Jane Smith	25	jane.smith@example.com	555-0102	Active	Cash
3	Emily Davis	35	emily.davis@example.com	555-0103	Active	Cash
4	Michael Brown	28	michael.brown@example.com	555-0104	Active	Cash
5	Sarah Wilson	40	sarah.wilson@example.com	555-0105	Active	Cash

Administration Schemas Output

Action Output

#	Time	Action	Message	Duration / Fetch
137	01:27:10	SELECT * FROM BookingDetails LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
138	01:33:55	ALTER TABLE table_name DROP COLUMN prefered_payment_method_new	Error Code: 1146. Table 'miniproject.table_name' doesn't exist	0.000 sec
139	01:34:07	ALTER TABLE customer DROP COLUMN prefered_payment_method_new	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.031 sec
140	01:34:21	select* from customer LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
141	01:35:21	alter table customer drop column prefered_payment_method_new2	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.031 sec
142	01:35:49	select* from customer LIMIT 0, 1000	5 row(s) returned	0.016 sec / 0.000 sec

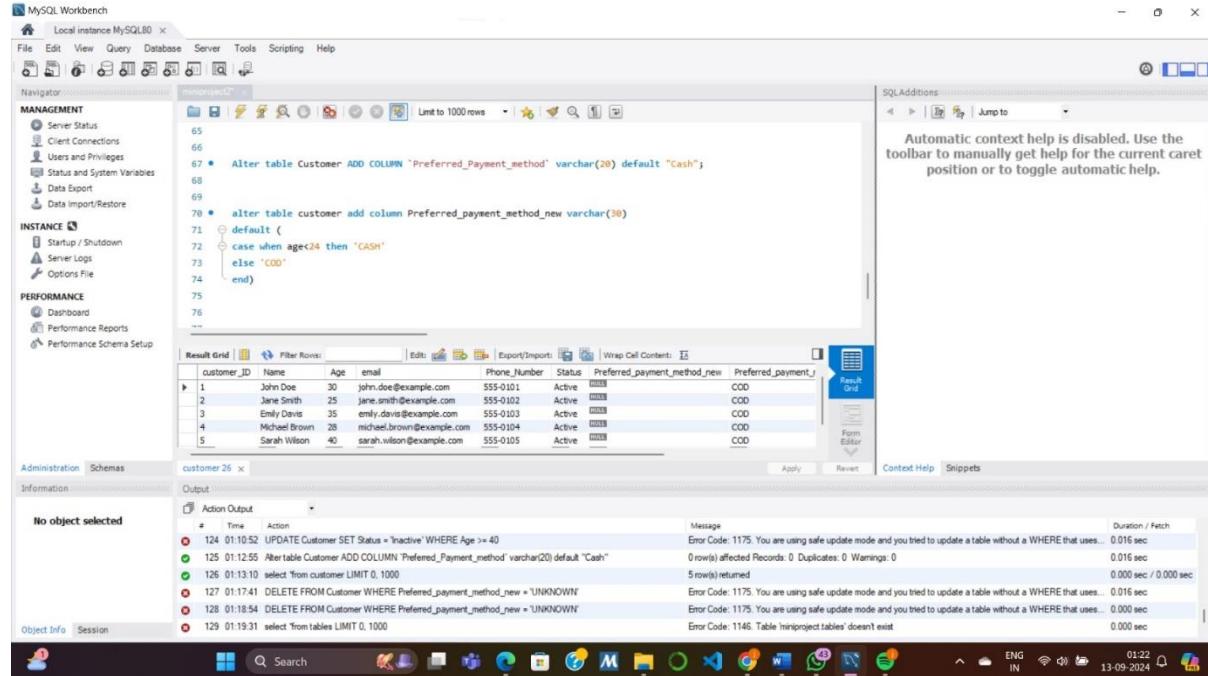
No object selected

Object Info Session

4. Write and run an SQL statement to update the default value of the newly added column to a different value

for certain rows based on a condition using any other column.

Alter table customer Add column Preferred\_payment\_method\_new  
varchar(30) default ( case when age



The screenshot shows the MySQL Workbench interface. In the SQL editor pane, there is a script with the following code:

```
65
66
67 • Alter table Customer ADD COLUMN 'Preferred_Payment_Method' varchar(20) default "Cash";
68
69
70 • alter table customer add column Preferred_payment_method_new varchar(30)
71     default (
72         case when age<24 then 'CASH'
73             else 'COD'
74         end)
75
76
77
```

In the Results Grid pane, there is a table named 'customer' with 5 rows of data:

customer_ID	Name	Age	email	Phone_Number	Status	Preferred_payment_method_new	Preferred_payment_I
1	John Doe	30	john.doe@example.com	555-0101	Active	COD	COD
2	Jane Smith	25	jane.smith@example.com	555-0102	Active	COD	COD
3	Emily Davis	35	emily.davis@example.com	555-0103	Active	COD	COD
4	Michael Brown	28	michael.brown@example.com	555-0104	Active	COD	COD
5	Sarah Wilson	40	sarah.wilson@example.com	555-0105	Active	COD	COD

The status bar at the bottom right shows the date and time as 13-09-2024 01:22.

5. In this section, you are required to write SQL queries to interact with the database you implemented. Answer

each SQL question in this section with the following:

- Write an SQL query to demonstrate the use of SELECT with INNER JOIN and ORDER BY.

SELECT b.Booking\_ID, c.Name AS Customer\_Name, d.Name AS Driver\_Name,  
b.Booking\_Date

FROM Booking b

INNER JOIN Customer c ON b.Customer\_ID = c.Customer\_ID

INNER JOIN Driver d ON b.Driver\_ID = d.Driver\_ID

ORDER BY b.Booking\_Date;

The screenshot shows the MySQL Workbench interface. In the top-left corner, it says "Local instance MySQL80". The main area is a query editor titled "miniproject2". It contains the following SQL code:

```

69 alter table customer add column Preferred_payment_method_new varchar(10)
70 default (
71 case when age<24 then 'CASH'
72 else 'COD'
73 end)
74
75 USE miniproject;
76 * SELECT b.Booking_ID, c.Name AS Customer_Name, d.Name AS Driver_Name, b.Booking_Date
77 FROM Booking b
78 INNER JOIN Customer c ON b.Customer_ID = c.Customer_ID
79 INNER JOIN Driver d ON b.Driver_ID = d.Driver_ID
80 ORDER BY b.Booking_Date;
81

```

Below the code is a "Result Grid" showing the following data:

Booking_ID	Customer_Name	Driver_Name	Booking_Date
1	John Doe	Alice Johnson	2024-09-01
2	Jane Smith	Bob Lee	2024-09-02
3	Emily Davis	Charlie Brown	2024-09-03
4	Michael Brown	David Wilson	2024-09-04
5	Sarah Wilson	Ela Davis	2024-09-05

At the bottom of the interface, there is a "Session" tab and a system tray showing the date and time as 13-09-2024.

- b) Write an SQL query to demonstrate the use of SELECT with WHERE and IN.

**SELECT \* FROM Customer**

**WHERE Customer\_ID IN (1, 3, 5);**

The screenshot shows the MySQL Workbench interface. In the top-left corner, it says "Local instance MySQL80". The main area is a query editor titled "miniproject2". It contains the following SQL code:

```

72 case when age<24 then 'CASH'
73 else 'COD'
74 end)
75
76 * SELECT b.Booking_ID, c.Name AS Customer_Name, d.Name AS Driver_Name, b.Booking_Date
77 FROM Booking b
78 INNER JOIN Customer c ON b.Customer_ID = c.Customer_ID
79 INNER JOIN Driver d ON b.Driver_ID = d.Driver_ID
80 ORDER BY b.Booking_Date;
81
82 * SELECT * FROM Customer
83 WHERE Customer_ID IN (1, 3, 5);
84

```

Below the code is a "Result Grid" showing the following data:

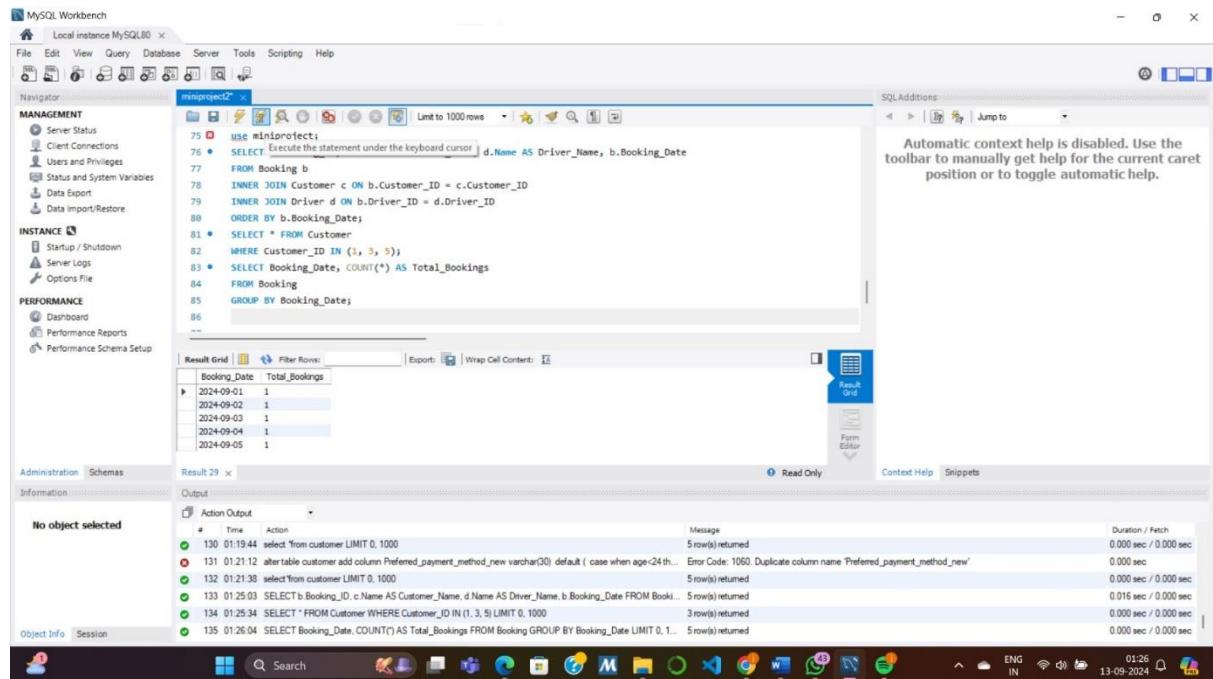
customer_id	Name	Age	email	Phone_Number	Status	Preferred_payment_method_new
1	John Doe	30	john.doe@example.com	555-0101	Active	COD
3	Emily Davis	35	emily.davis@example.com	555-0103	Active	COD
5	Sarah Wilson	40	sarah.wilson@example.com	555-0105	Active	COD

At the bottom of the interface, there is a "Session" tab and a system tray showing the date and time as 13-09-2024.

- c) Write an SQL query to demonstrate the use of at least one DATE function.

**SELECT Booking\_Date, COUNT(\*) AS Total\_Bookings**

FROM Booking  
 GROUP BY Booking\_Date;



```

USE miniproject;
SELECT Booking_Date, COUNT(*) AS Total_Bookings
FROM Booking
INNER JOIN Customer c ON b.Customer_ID = c.Customer_ID
INNER JOIN Driver d ON b.Driver_ID = d.Driver_ID
GROUP BY Booking_Date;
    
```

Booking_Date	Total_Bookings
2024-09-01	1
2024-09-02	1
2024-09-03	1
2024-09-04	1
2024-09-05	1

Action Output

Action	Time	Message	Duration / Fetch
130	01:19:44	select from customer LIMIT 0, 1000	5 row(s) returned 0.000 sec / 0.000 sec
131	01:21:12	alter table customer add column Preferred_payment_method_new varchar(30) default ('case when age<24 then...	Error Code: 1060. Duplicate column name 'Preferred_payment_method_new' 0.000 sec
132	01:21:38	select from customer LIMIT 0, 1000	5 row(s) returned 0.000 sec / 0.000 sec
133	01:25:03	SELECT b.Booking_ID, c.Name AS Customer_Name, d.Name AS Driver_Name, b.Booking_Date FROM Book...	5 row(s) returned 0.016 sec / 0.000 sec
134	01:25:34	SELECT * FROM Customer WHERE Customer_ID IN (1, 3, 5) LIMIT 0, 1000	3 row(s) returned 0.000 sec / 0.000 sec
135	01:26:04	SELECT Booking_Date, COUNT(*) AS Total_Bookings FROM Booking GROUP BY Booking_Date LIMIT 0, 1...	5 row(s) returned 0.000 sec / 0.000 sec

d) Write an SQL statement to create a VIEW using a SELECT statement with a JOIN. Provide the statement

to create the VIEW you want and demonstrate the output of the VIEW using 'SELECT \* FROM

<viewname>;'

CREATE VIEW BookingDetails AS

```

SELECT b.Booking_ID, b.Booking_Date, c.Name AS Customer_Name,
b.Current_Location, b.Destination_Location
FROM Booking b
INNER JOIN Customer c ON b.Customer_ID = c.Customer_ID;
    
```

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator miniproject2

MANAGEMENT

- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

Administration Schemas

No object selected

Information Output

Action Output

#	Time	Action	Message	Duration / Fetch
131	01:21:12	alter table customer add column Preferred_payment_method_new varchar(30) default ( case when age<24 then	Error Code: 1060 Duplicate column name 'Preferred_payment_method_new'	0.000 sec
132	01:21:38	select from customer LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
133	01:25:03	SELECT b.Booking_ID, c.Name AS Customer_Name, d.Name AS Driver_Name, b.Booking_Date FROM Booking b INNER JOIN Customer c ON b.Customer_ID = c.Customer_ID WHERE Customer_ID IN (1, 3, 5) LIMIT 0, 1000	5 row(s) returned	0.016 sec / 0.000 sec
134	01:25:34	SELECT * FROM Customer WHERE Customer_ID IN (1, 3, 5) LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
135	01:26:04	SELECT Booking_Date, COUNT(*) AS Total_Bookings FROM Booking GROUP BY Booking_Date LIMIT 0, 1...	5 row(s) returned	0.000 sec / 0.000 sec
136	01:26:34	CREATE VIEW BookingDetails AS SELECT b.Booking_ID, b.Booking_Date, c.Name AS Customer_Name, b.C...	0 row(s) affected	0.000 sec

Object Info Session

miniproject2

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context Help Snippets

01:26 ENG IN 13-09-2024

The screenshot shows the MySQL Workbench interface. The main window displays a query editor with the following SQL code:

```
79    INNER JOIN Driver d ON b.Driver_ID = d.Driver_ID
80    ORDER BY Booking_Date
81  •   SELECT * FROM Customer
82    WHERE Customer_ID IN (1, 3, 5);
83  •   SELECT Booking_Date, COUNT(*) AS Total_Bookings
84    FROM Booking
85    GROUP BY Booking_Date;
86  •   CREATE VIEW BookingDetails AS
87    SELECT b.Booking_ID, b.Booking_Date, c.Name AS Customer_Name, b.Current_Location, b.Destination_Location
88    FROM Booking b
89    INNER JOIN Customer c ON b.Customer_ID = c.Customer_ID;
```

The Performance tab shows a timeline of actions with their times, descriptions, messages, and durations. The system tray at the bottom right shows the date and time as 01:26 13-09-2024.