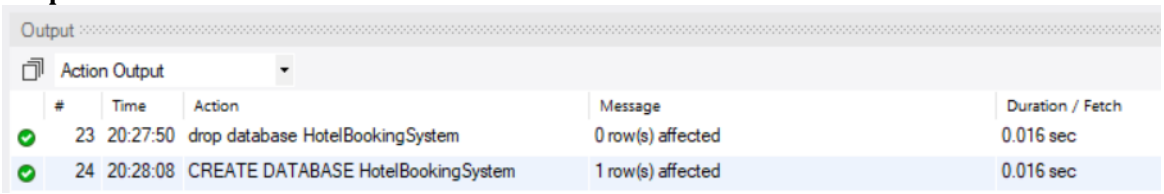
SQL Internship Task 2: Hotel Booking System

Step 1: Create the Database

Query:
```
CREATE DATABASE HotelBookingSystem;
```

Explanation:
This query creates a new database named 'HotelBookingSystem'.

Output:

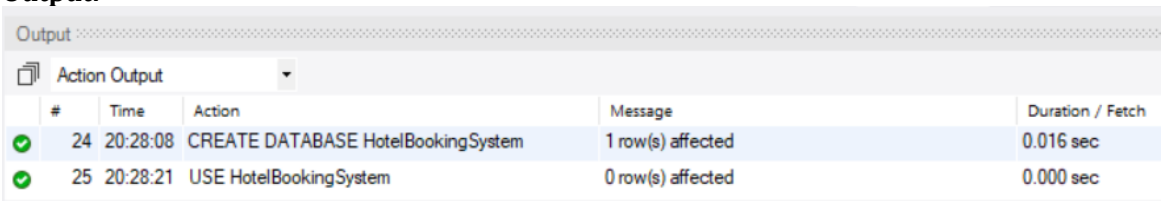


Step 2: Use the Created Database

Query:
```
USE HotelBookingSystem;
```

Explanation:
Switches the active database context to 'HotelBookingSystem'.

Output:



Step 3: Create the Tables

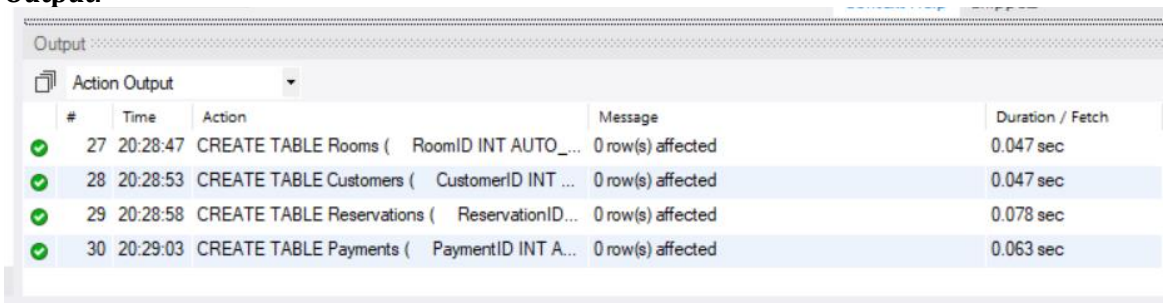
Query:

```
-- Rooms Table
CREATE TABLE Rooms (
   RoomID INT AUTO_INCREMENT PRIMARY KEY,
   RoomNumber VARCHAR(10) UNIQUE NOT NULL,
   RoomType VARCHAR(50) NOT NULL,
   Capacity INT NOT NULL,
   PricePerNight FLOAT NOT NULL,
   Availability BOOLEAN DEFAULT TRUE
);
```

```
-- Customers Table
CREATE TABLE Customers (
   CustomerID INT AUTO_INCREMENT PRIMARY KEY,
   FirstName VARCHAR(50) NOT NULL,
   LastName VARCHAR(50) NOT NULL,
   Email VARCHAR(100) UNIQUE NOT NULL,
   Phone VARCHAR(15) NOT NULL,
   Address VARCHAR(255)
);

-- Reservations Table
CREATE TABLE Reservations (
   ReservationID INT AUTO_INCREMENT PRIMARY KEY,
   CustomerID INT,
   RoomID INT,
   CheckInDate DATE NOT NULL,
   CheckOutDate DATE NOT NULL,
   TotalAmount FLOAT NOT NULL,
   Status VARCHAR(20) DEFAULT 'Confirmed',
   FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID),
   FOREIGN KEY (RoomID) REFERENCES Rooms(RoomID)
);

-- Payments Table
CREATE TABLE Payments (
   PaymentID INT AUTO_INCREMENT PRIMARY KEY,
   ReservationID INT,
   PaymentDate DATE NOT NULL,
   AmountPaid FLOAT NOT NULL,
   PaymentMethod VARCHAR(50) NOT NULL,
   PaymentStatus VARCHAR(20) DEFAULT 'Pending',
   FOREIGN KEY (ReservationID) REFERENCES Reservations(ReservationID)
);
```

Explanation:
Creates the 'Rooms', 'Customers', 'Reservations', and 'Payments' tables with appropriate relationships and constraints.

Output:



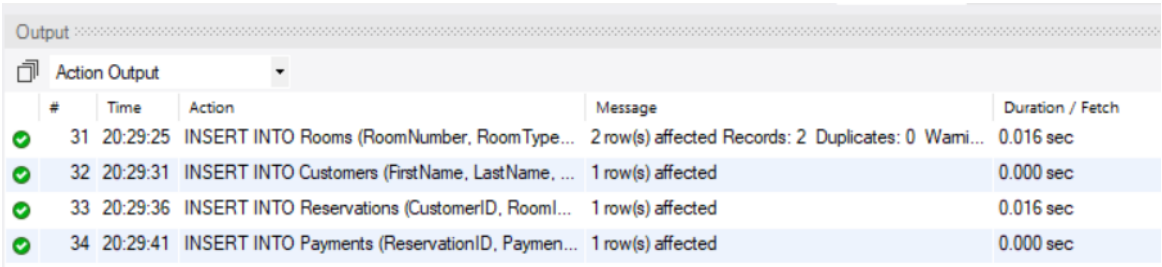
Step 4: Insert Data into Table

Query:

```
-- Insert Rooms

INSERT INTO Rooms (RoomNumber, RoomType, Capacity, PricePerNight, Availability) VALUES
('101', 'Single', 1, 1000.00, TRUE),
('102', 'Double', 2, 2000.00, TRUE);

-- Insert Customers

INSERT INTO Customers (FirstName, LastName, Email, Phone, Address) VALUES
('Riya', 'Kharade', 'riya@gmail.com', '8275005788', 'Kolhapur');

-- Insert Reservations

INSERT INTO Reservations (CustomerID, RoomID, CheckInDate, CheckOutDate, TotalAmount,
Status) VALUES
(1, 1, '2024-06-05', '2024-06-10', 5000.00, 'Confirmed');

-- Insert Payments

INSERT INTO Payments (ReservationID, PaymentDate, AmountPaid, PaymentMethod,
PaymentStatus) VALUES
(1, '2024-06-05', 5000.00, 'Credit Card', 'Paid');
```

Explanation:
Populates the 'Rooms', 'Customers', 'Reservations', and 'Payments' tables with sample data.

Output:



Step 5: Fetch Available Data

Query:
SELECT RoomNumber, RoomType, PricePerNight
FROM Rooms
WHERE Availability = TRUE;

Explanation:
Fetches all available rooms.

Output: