**OMIS 652: BUSINESS APPLICATIONS DATABASE MANAGEMENT SYSTEM**

**Project Title: ONLINE BUS TICKET RESERVATION**



**Group:** **I**

**Team Members:**

YASASWANI GANDI (Z1852719)

CHAITANYA SWAROOP POKURI (Z183880)

HEMNATH TUMMALA (Z1850110)

MANEESHA AVVARU (Z1835461)

**DESCRIPTION**

Online Bus booking system provides the facility to the passengers to book the tickets for buses that operate between cities Chicago, Rockford, Naperville etc. A passenger can book tickets by logging in with their username and password after which the booking information with such as Booking\_Id,Bus number,Date of journey,Source and Destination,number of passengers travelling are displayed. Each booking has a payment mode which can be either a Credit or Debit card.

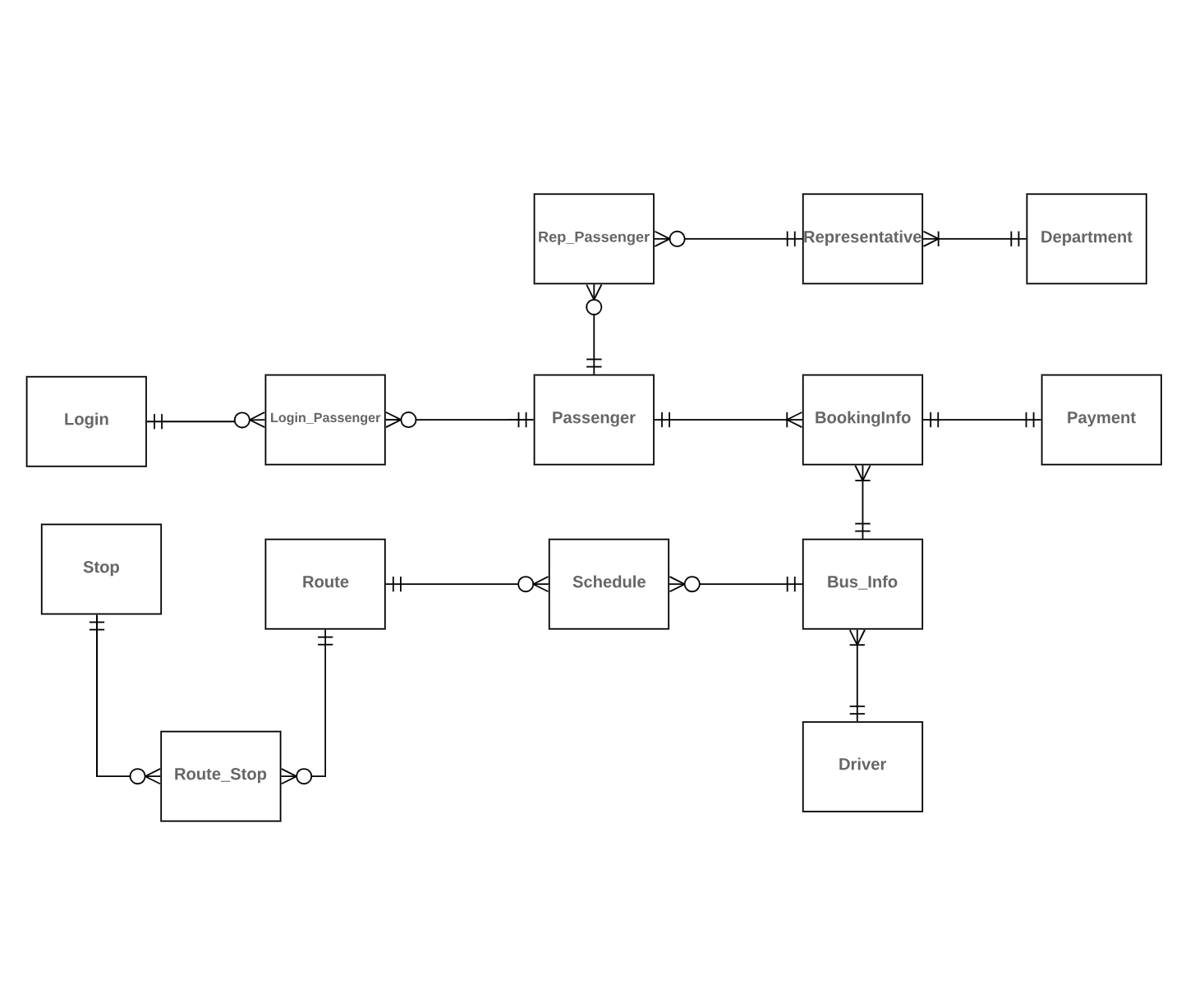
Each Bus has a unique bus number, rating, number of seats along with the driver details included.A bus can operate in multiple scheduled times having Departure and Arrival time information and each schedule for the bus is associated with specific route details such as Route\_Id and fare. Every Route has different stops in each city. Every Stop is represented with Stop\_Id, stop name in the cities Rosemont, Jackson, Naperville and Dekalb.

This system also provides the facility for passengers to talk to customer representative regarding any queries or complaints. Each representative has a unique Rep\_Id working each under different departments such as Booking, Payment, Front desk, Cancellations and Feedback & Complaints.

**ENTITIES AND ATTRIBUTES**

|  |  |
| --- | --- |
| **ENTITIES** | **ATTRIBUTES** |
| 1) Login | Login\_id  Username  Password |
| 2) Login\_Passenger | Pass\_id  Login\_id |
| 3) Passenger | Pass\_id  Name  Gender  Phone |
| 4) Rep\_Passenger | Rep\_Id  Pass\_Id |
| 5) Representative | Rep\_Id  Name  Gender  Dept\_Num |
| 6) Department | Dept\_Num  Dept\_Name |
| 7) BookingInfo | Booking\_Id  Pass\_Id  Bus\_no  Quantity  Source  Destination  DateOfJourney |
| 8) Payment | Pay\_Id  Booking\_Id  Price  Type |
| 9) Bus\_Info | Bus\_no  Schedule\_Id  Bus\_Rating  Seats  Driver\_Id |
| 10)Driver | Driver\_Id  Name  Contact  Rating |
| 11)Schedule | Schedule\_Id  Route\_Id  Departure  Arrival |
| 12)Route | Route\_Id  Fare |
| 13)Route\_stop | Route\_Id  Stop\_Id |
| 14)Stop | Stop\_Id  Name  City |

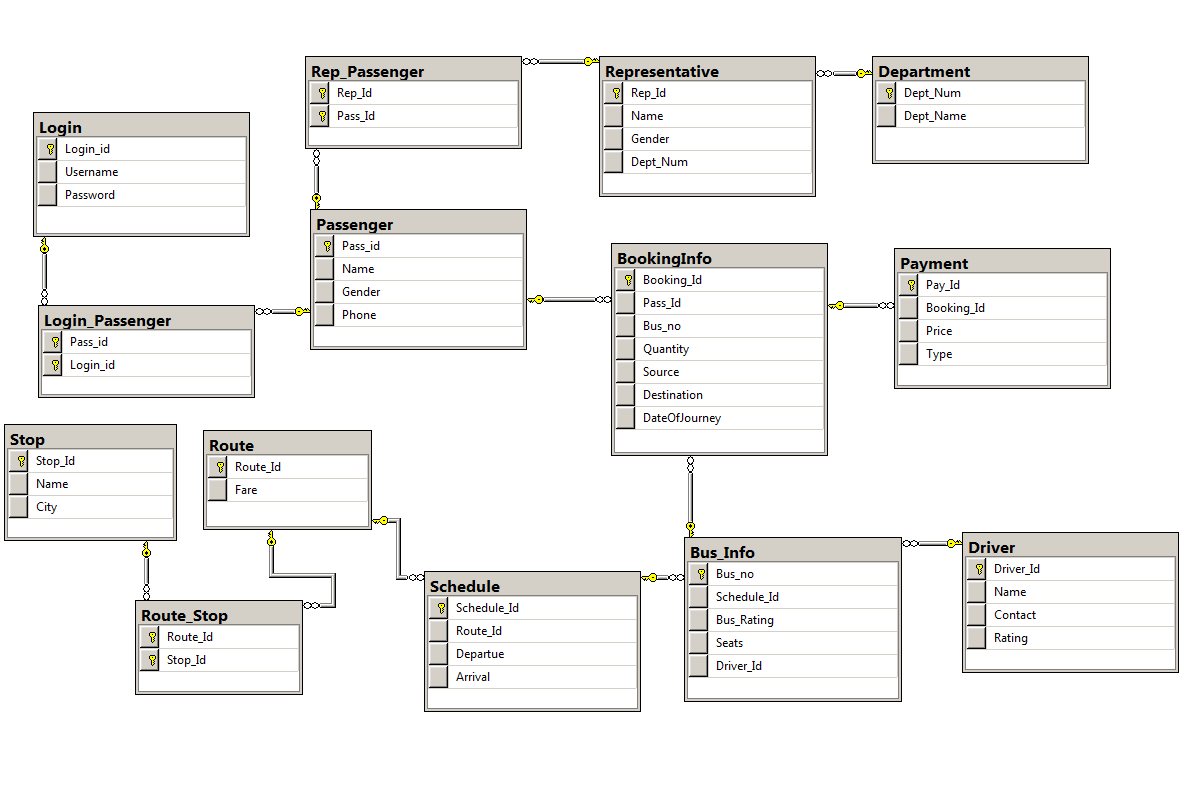
**ER DIAGRAM**

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**ASSUMPTIONS**

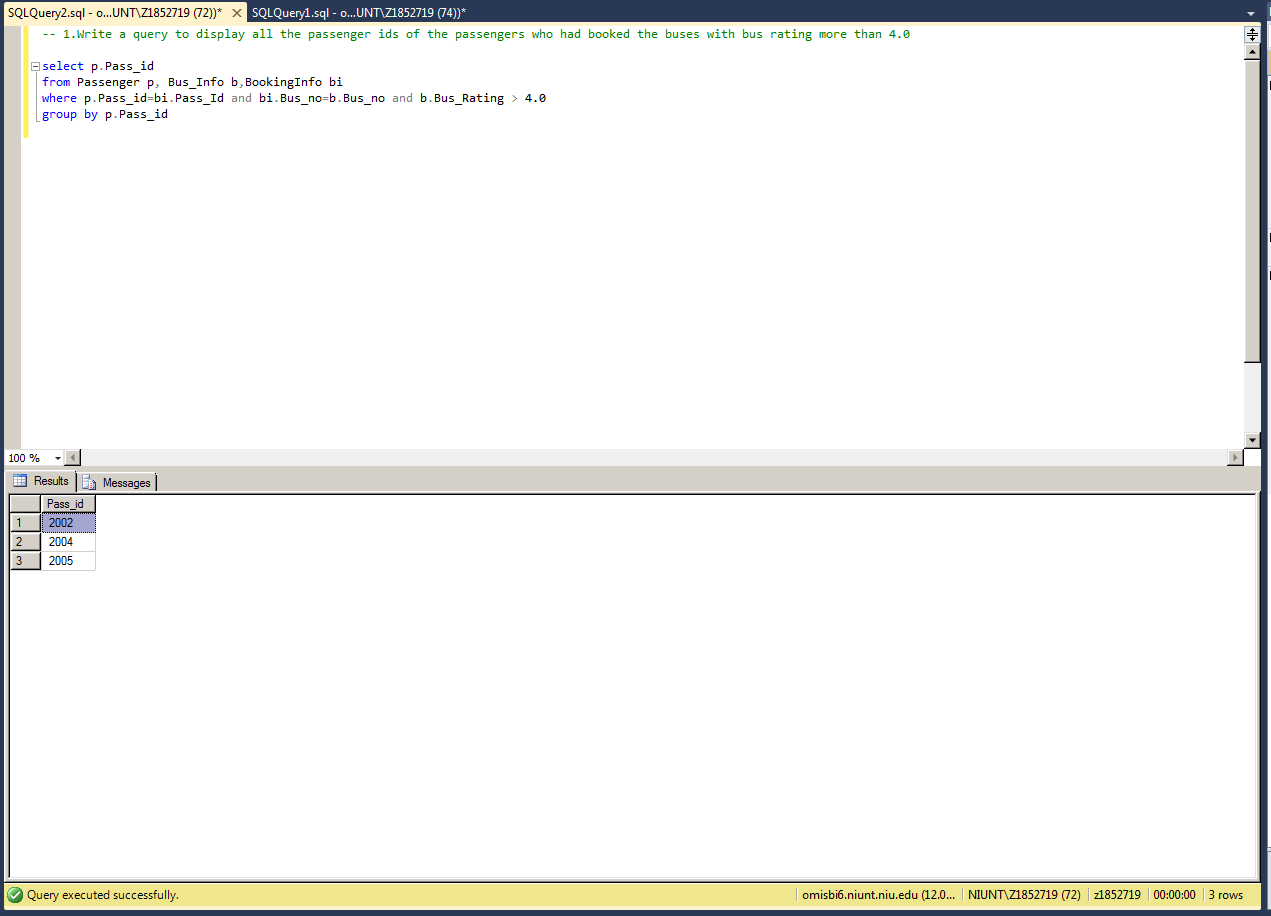
* Each User Credentials belong to one and only one passenger.
* A Passenger can have many login credentials.
* A Representative belong to one Department and a department can have many representatives.
* A passenger can book tickets any number of times.
* Each BookingId has a unique payment information.
* A Booking Info contains the details of one bus.
* A Bus has a driver and a driver can ride one or many buses.
* A Bus can have many schedules and a schedule belong to one bus.
* A Route\_stop can contain information of one route and a route can be included in zero or many Route\_stop.

**DATABASE DIAGRAM**

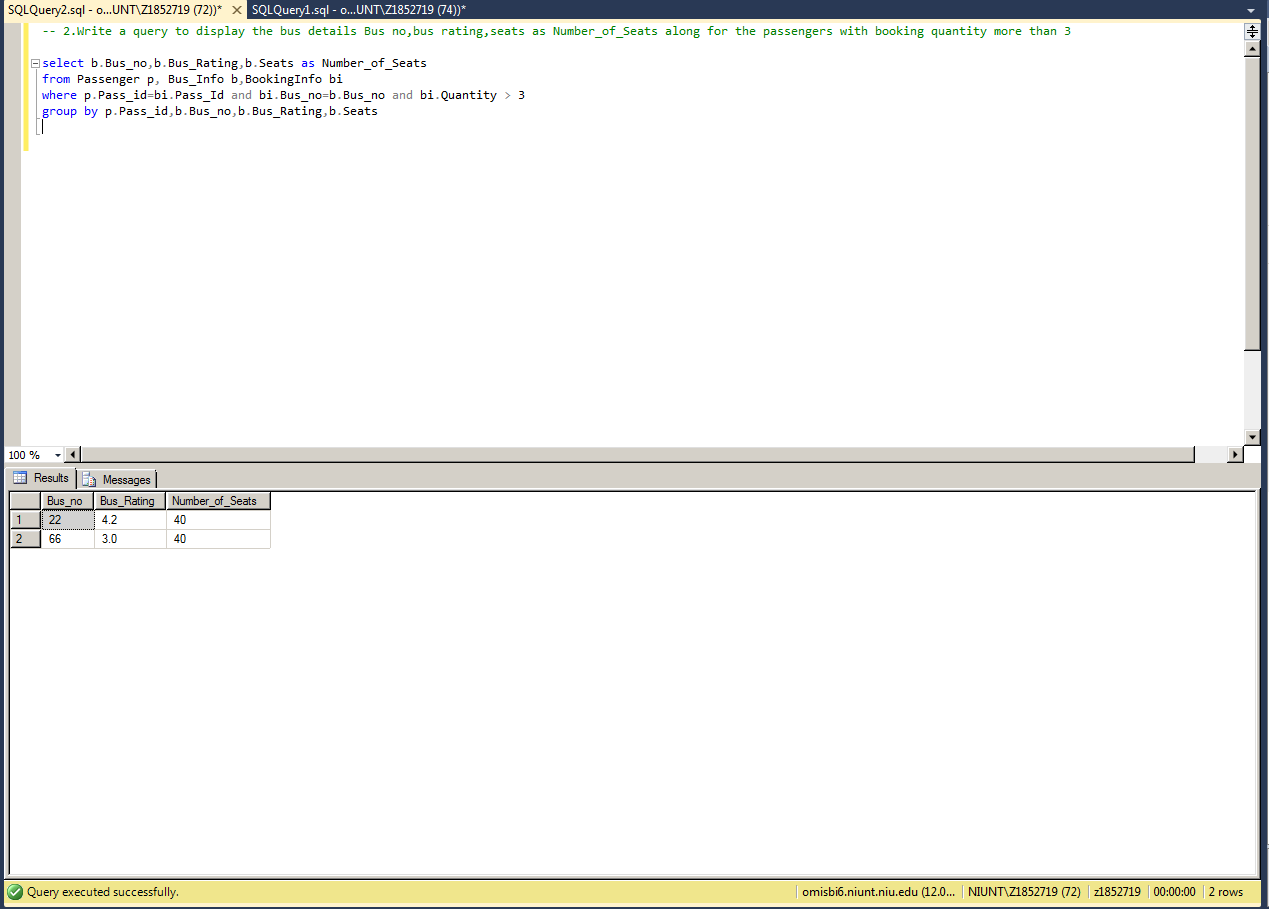


**QUERIES**

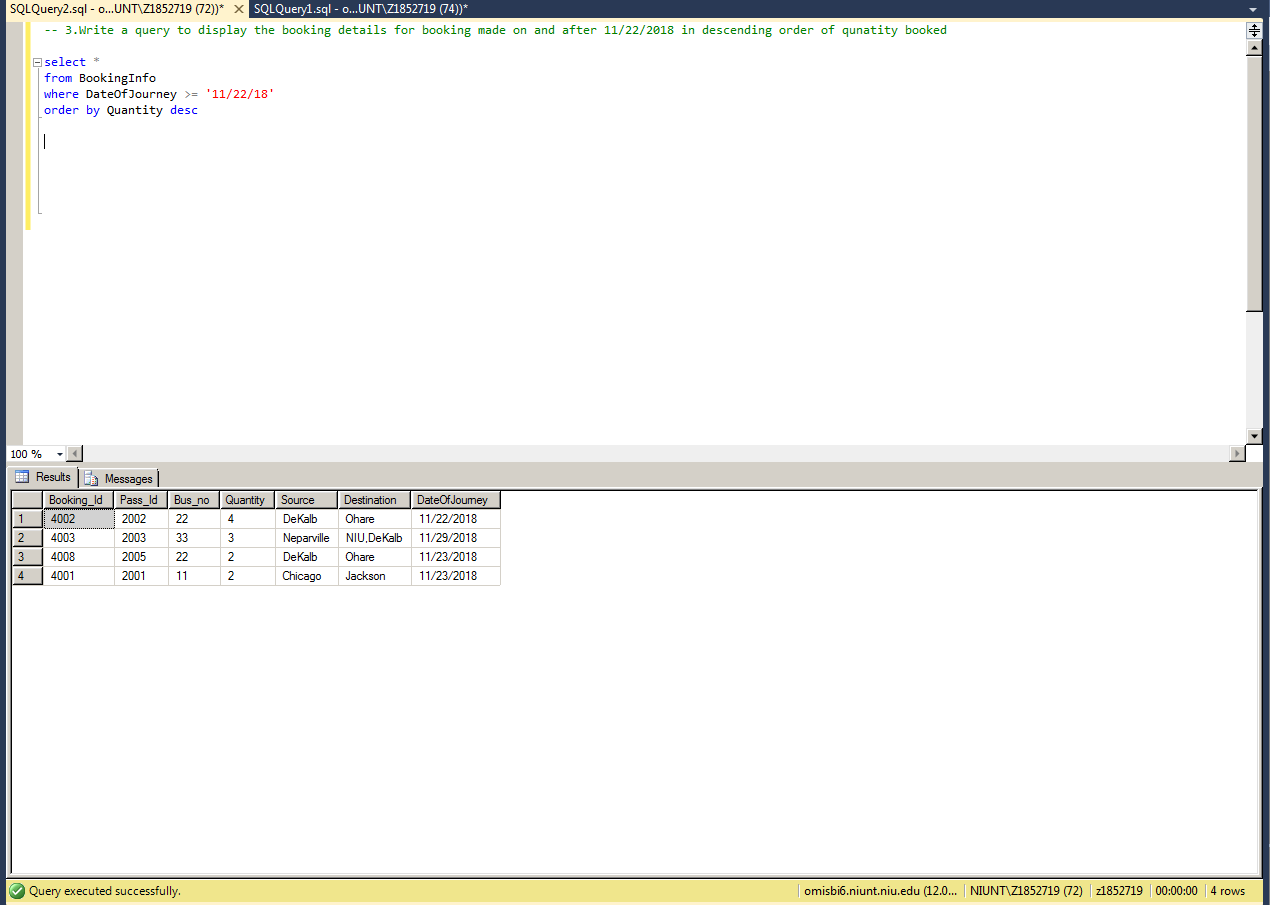
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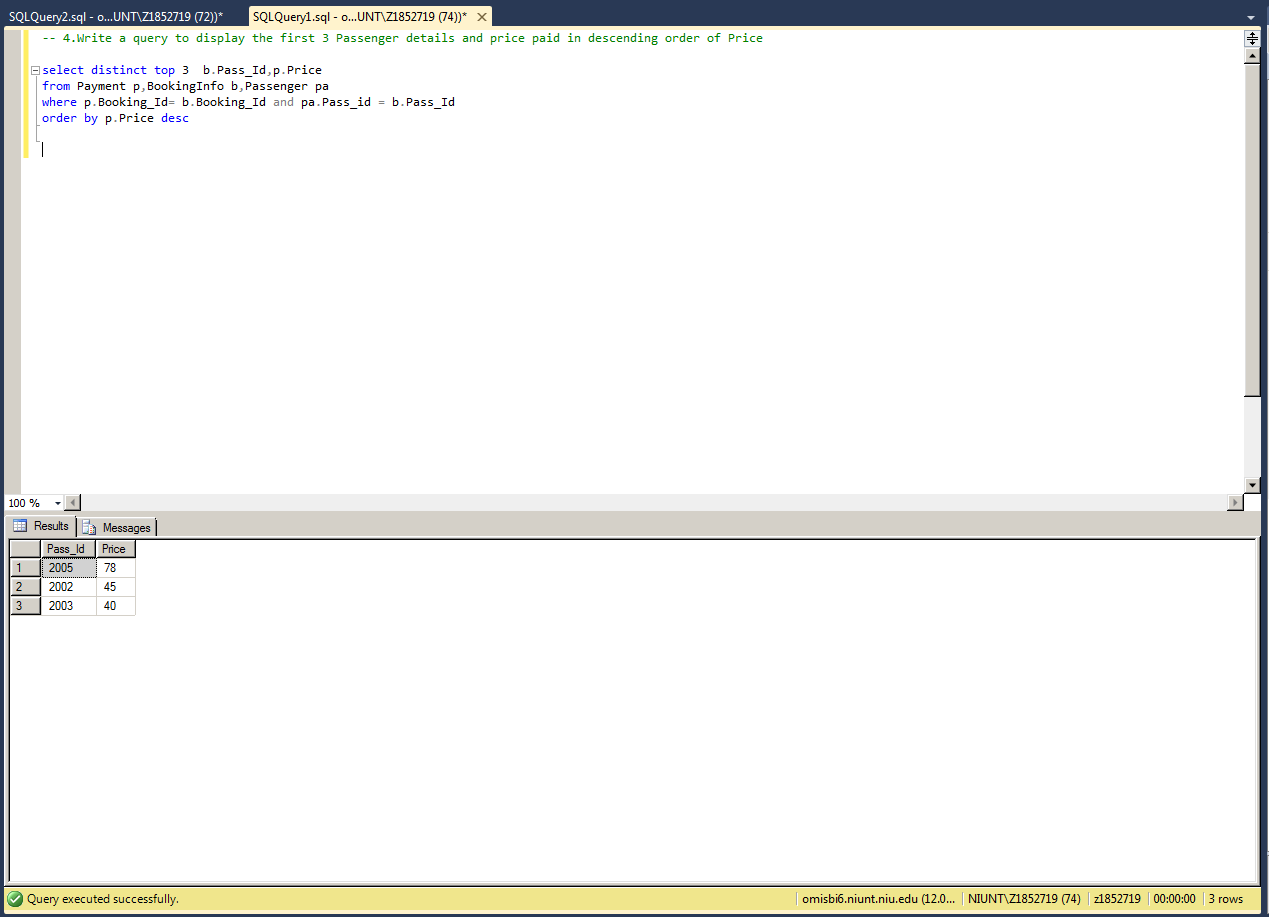
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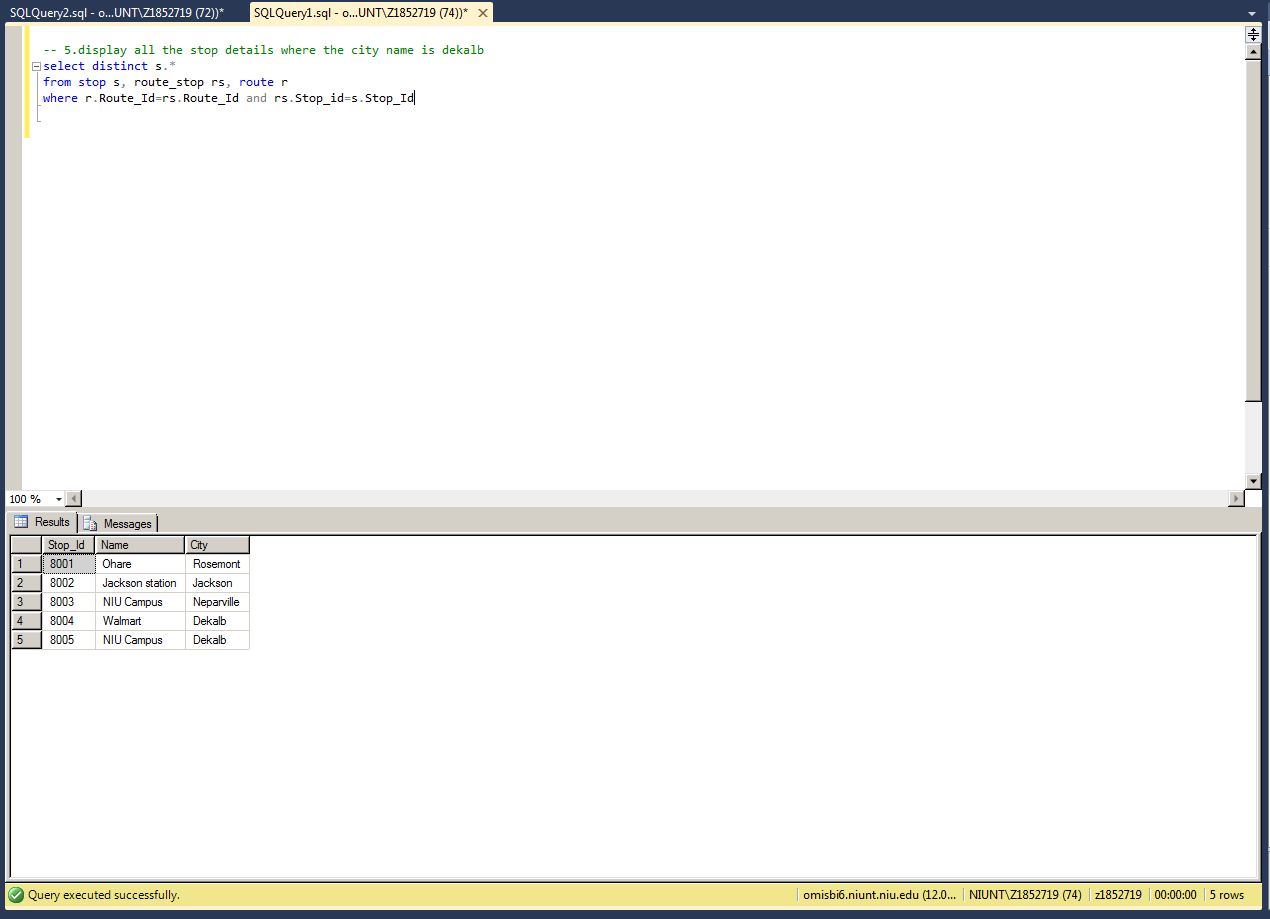
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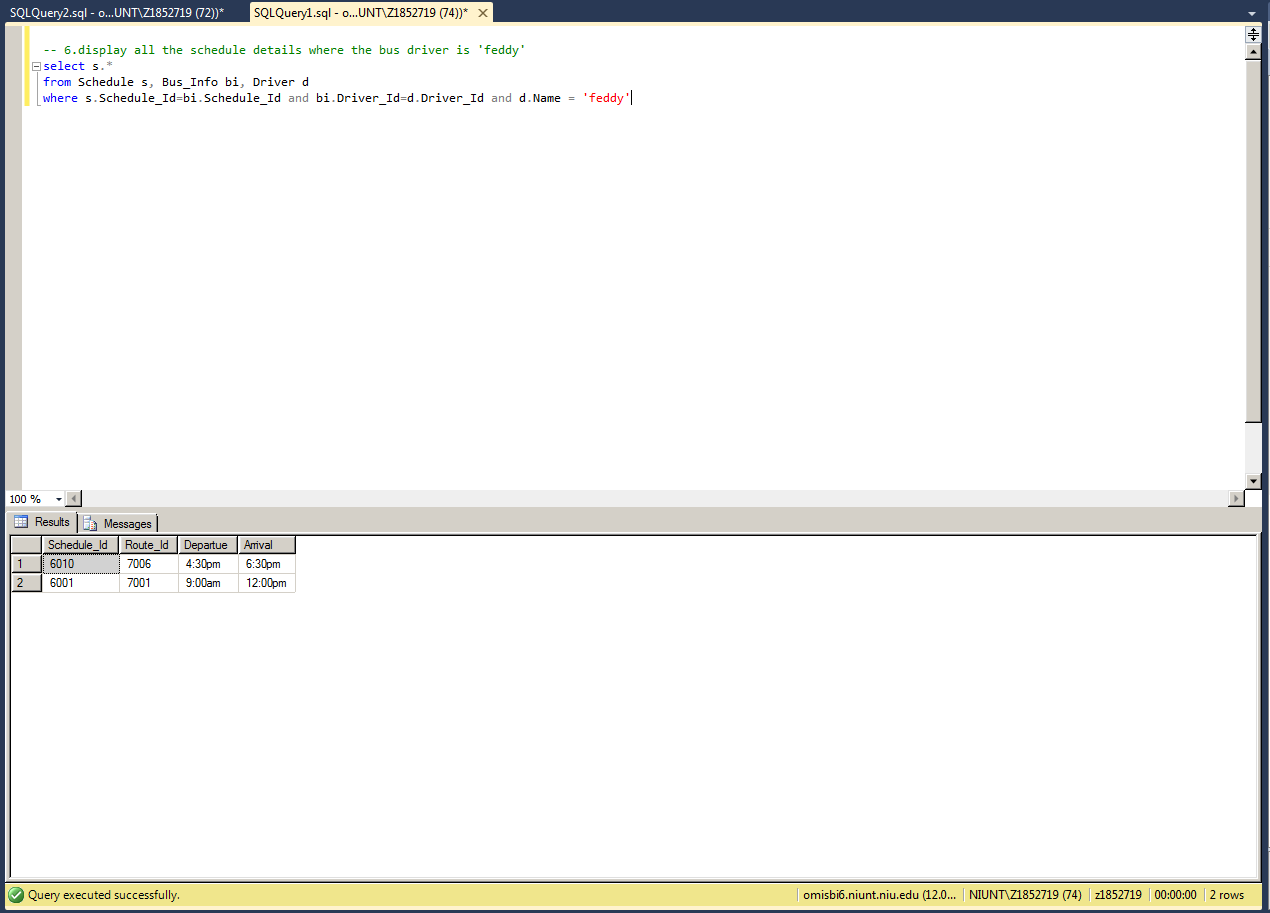
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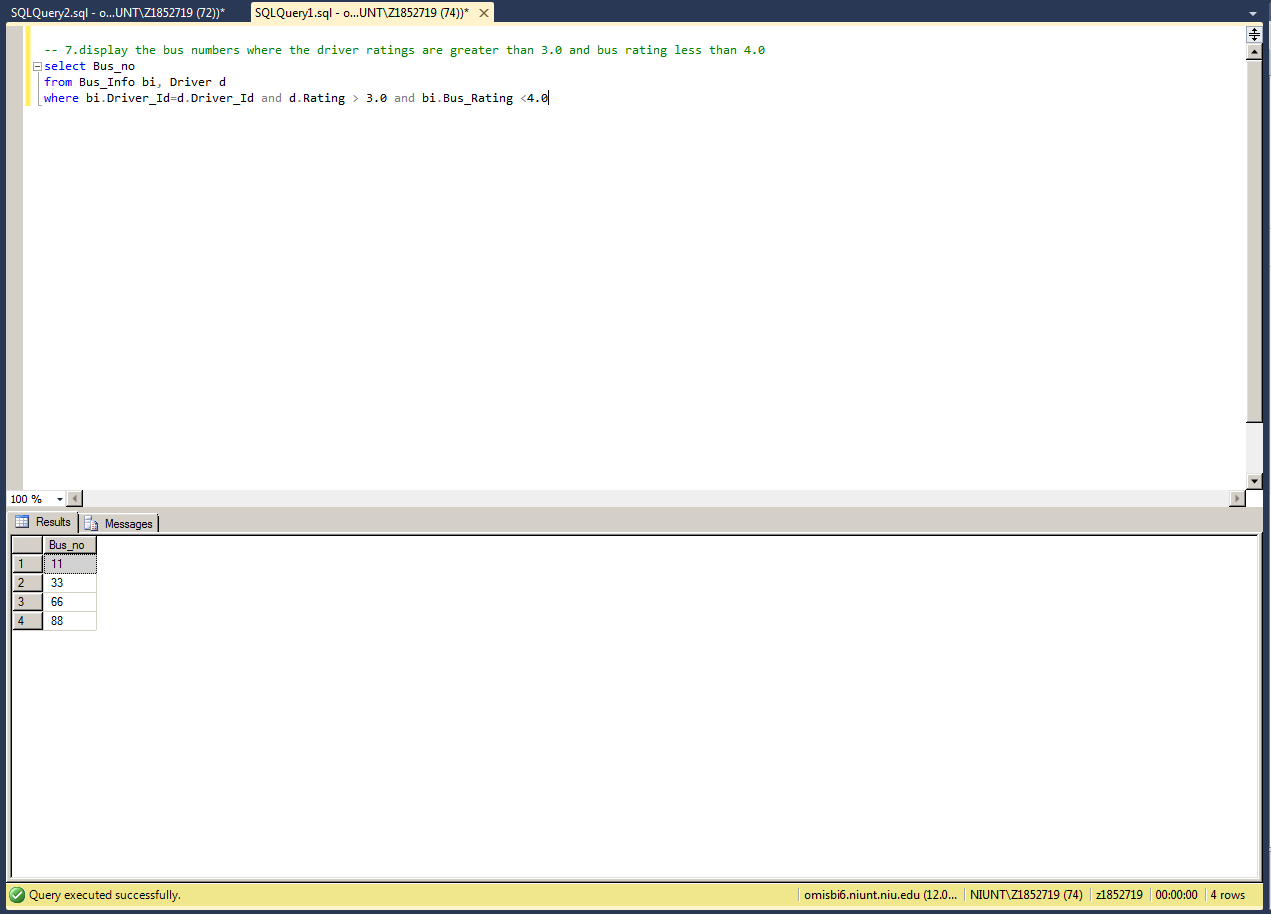
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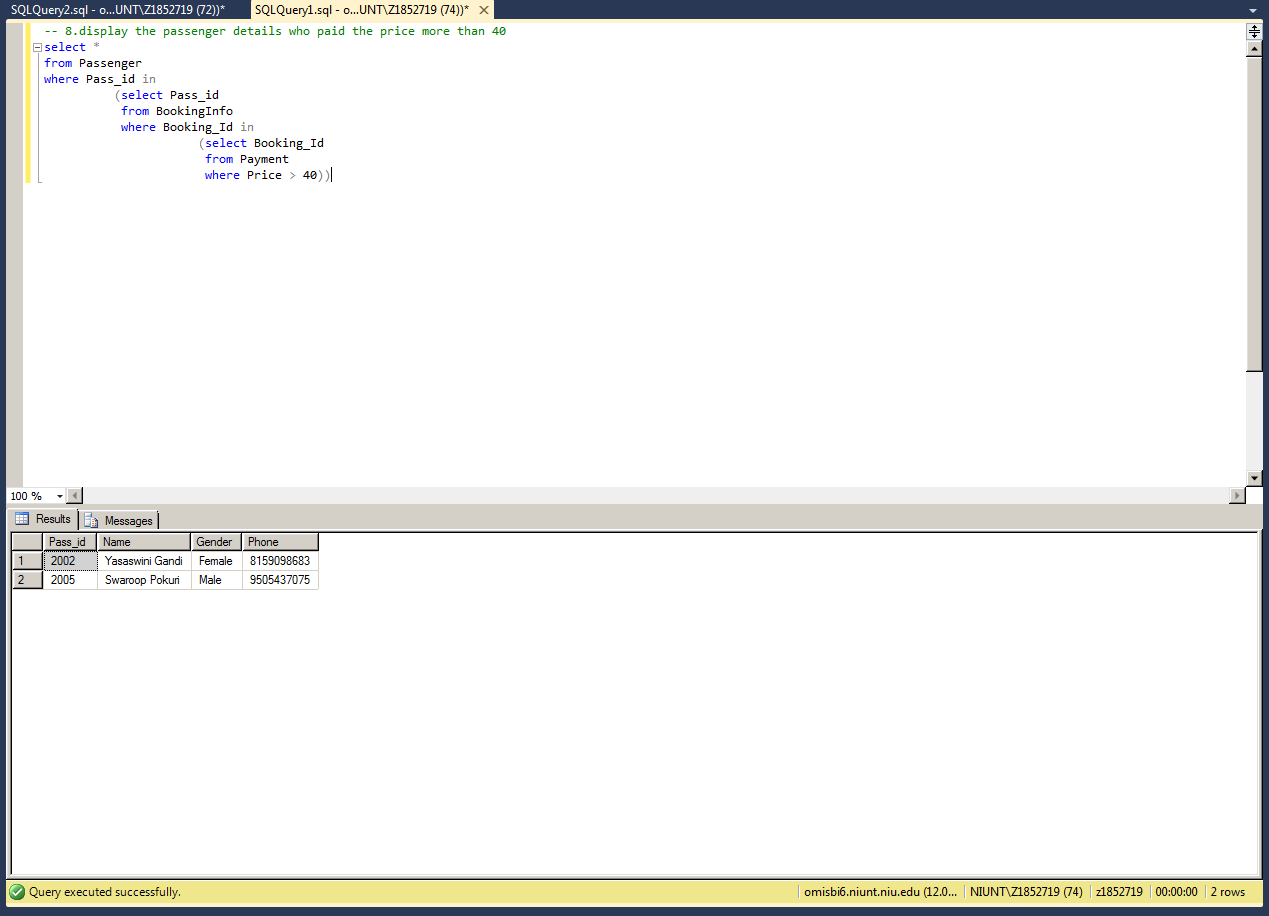
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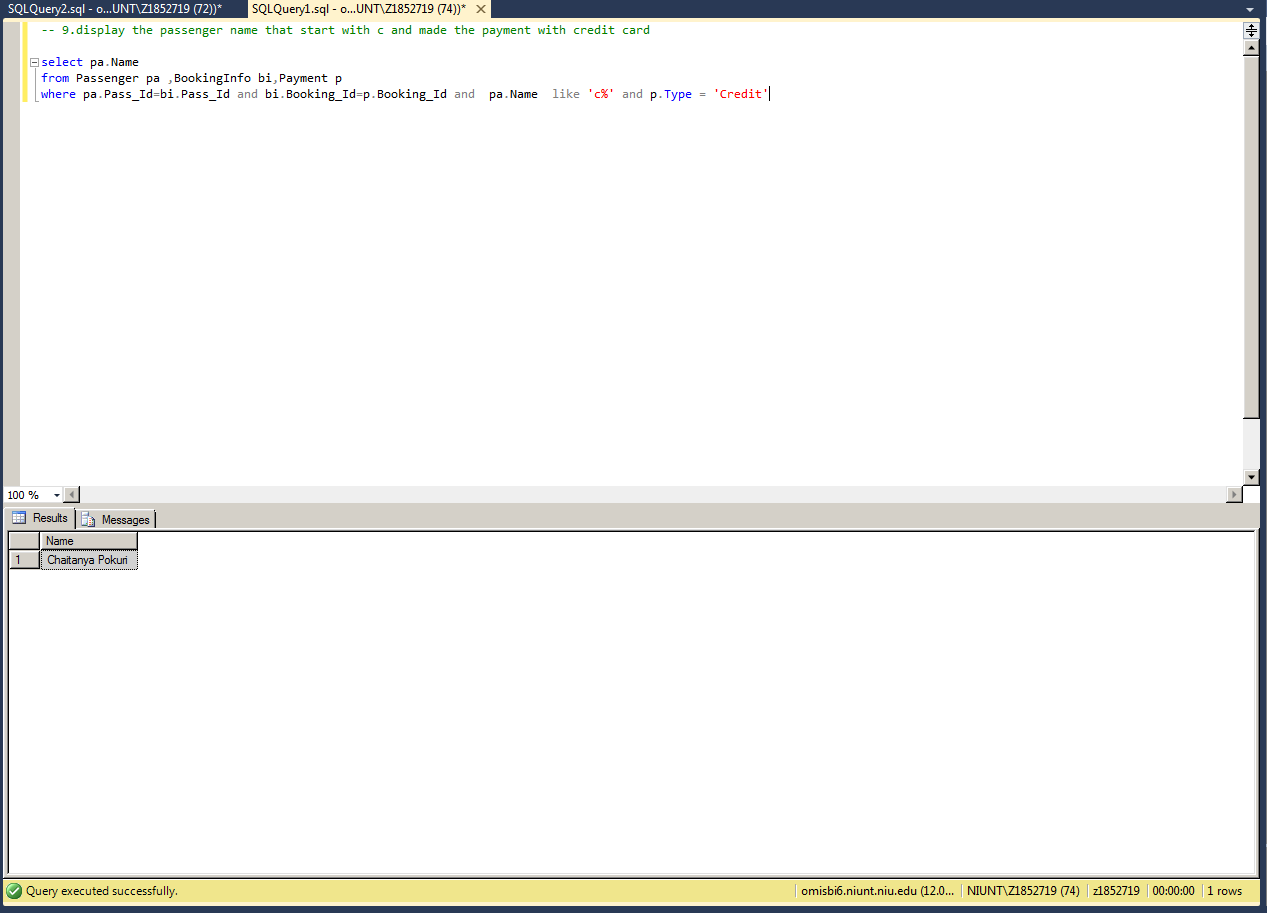
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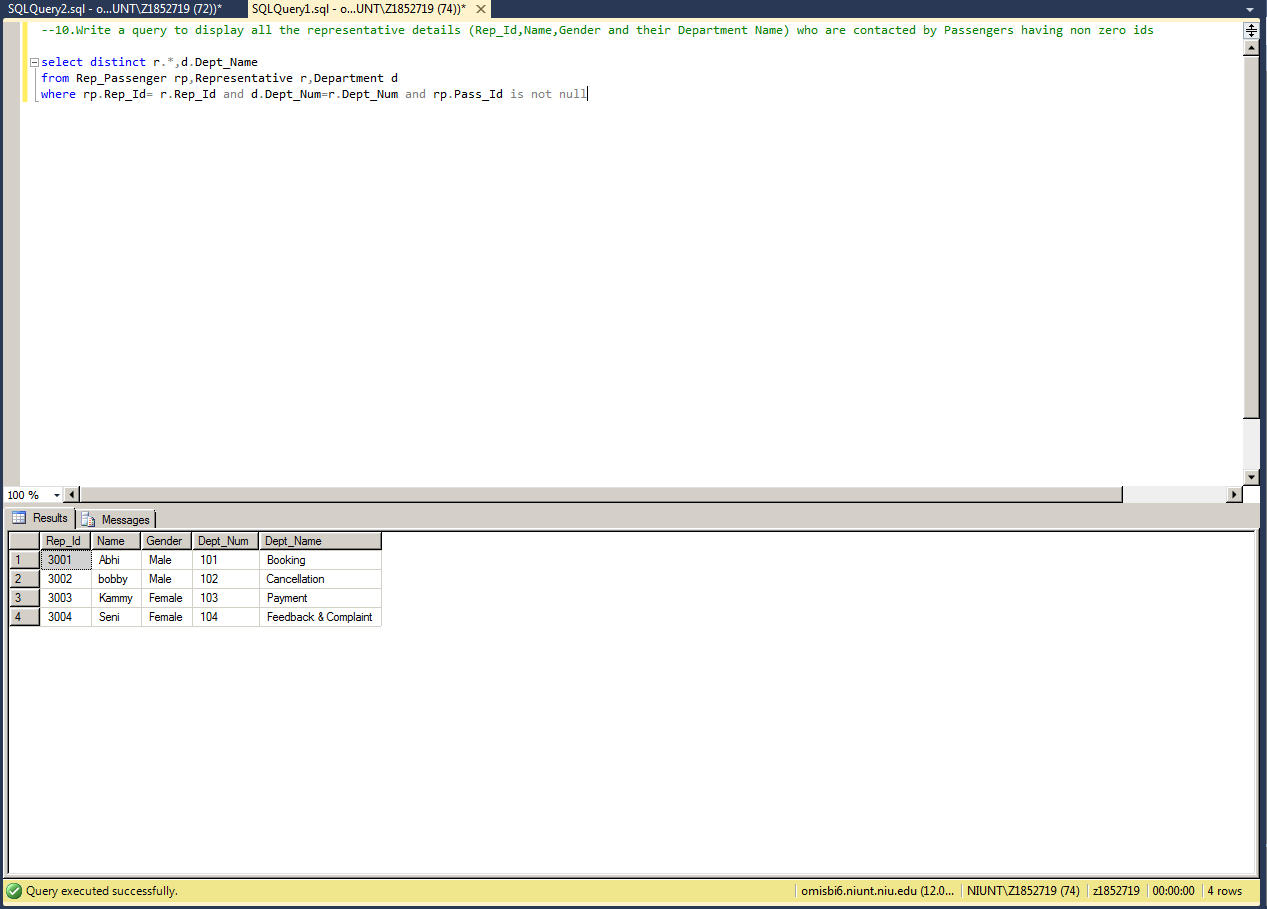
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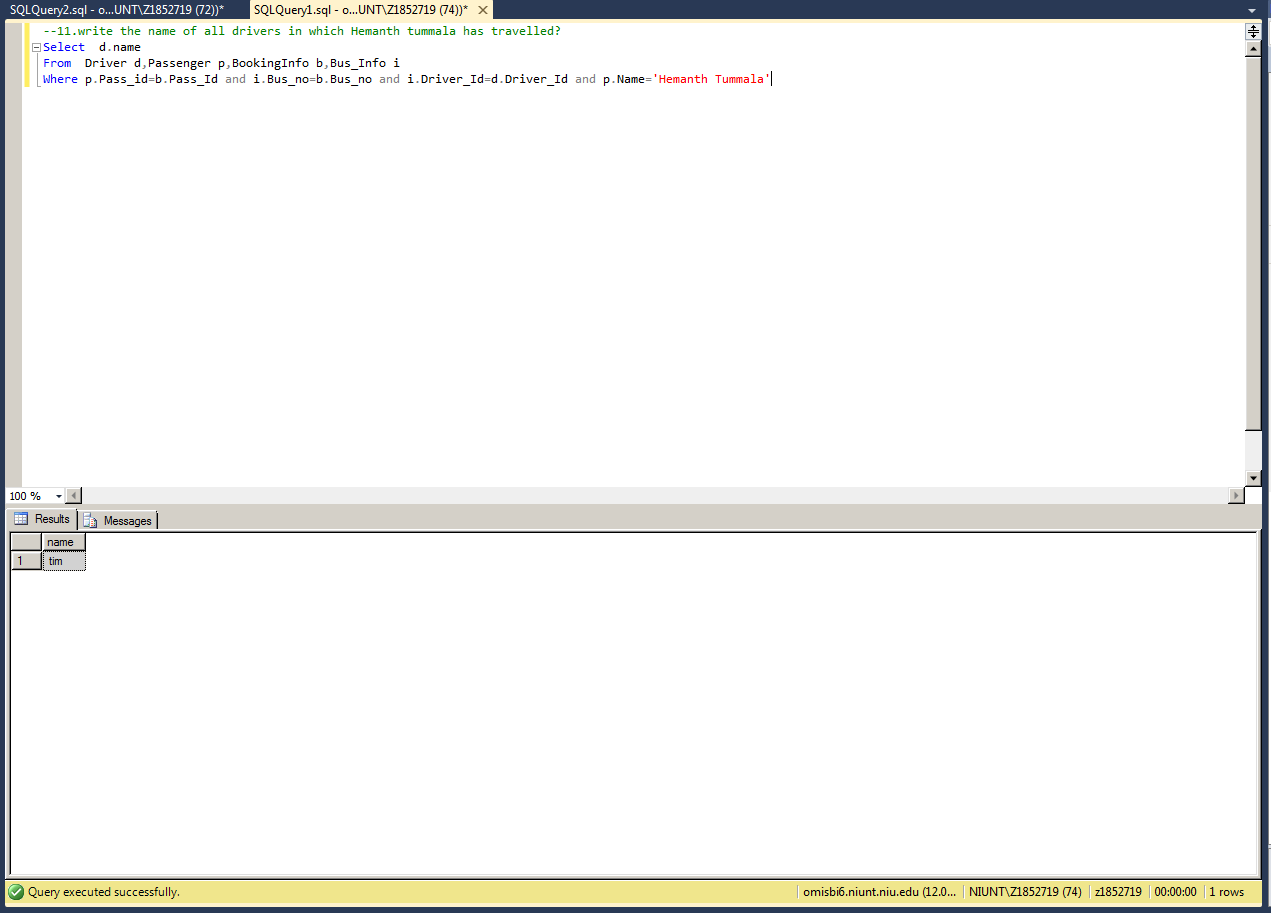
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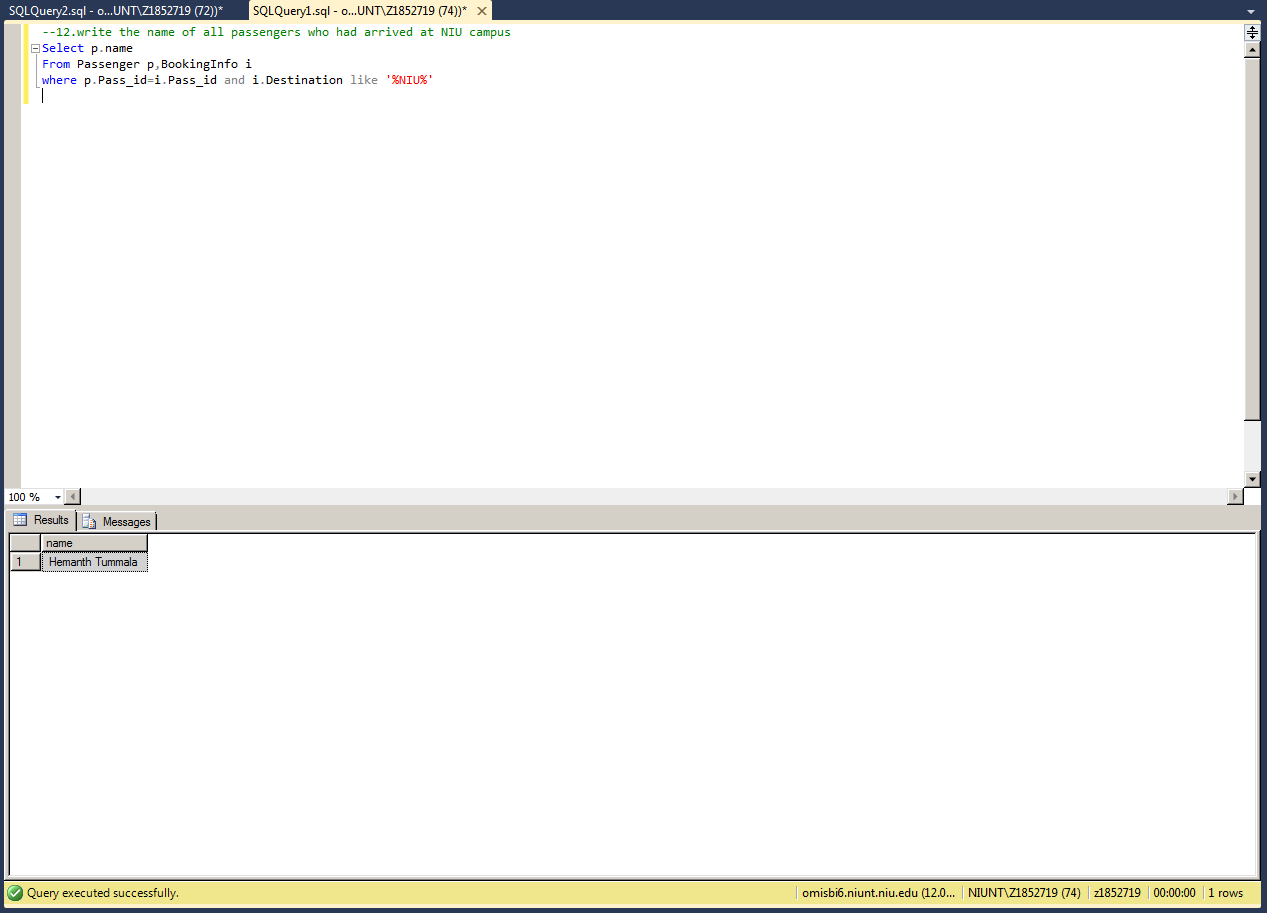
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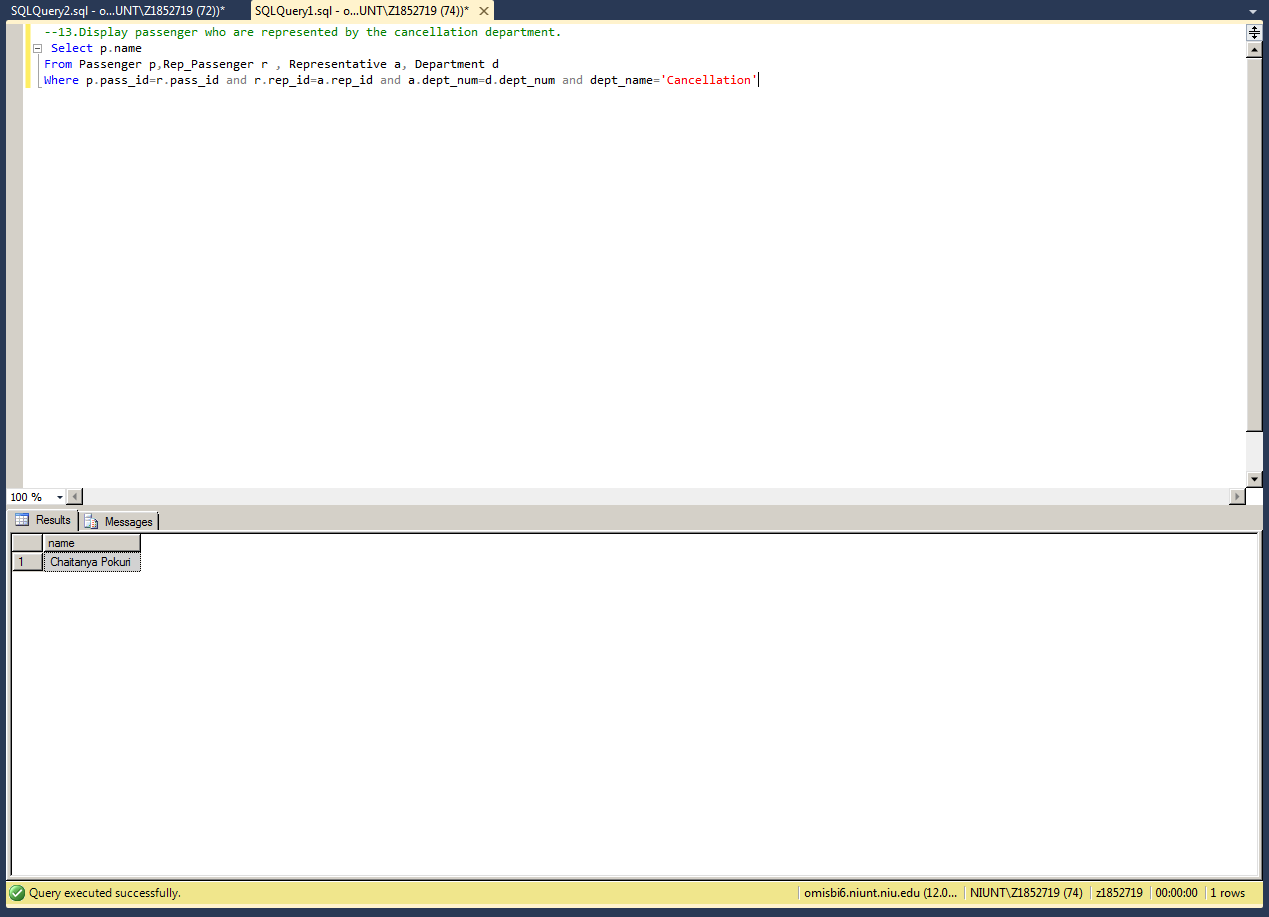
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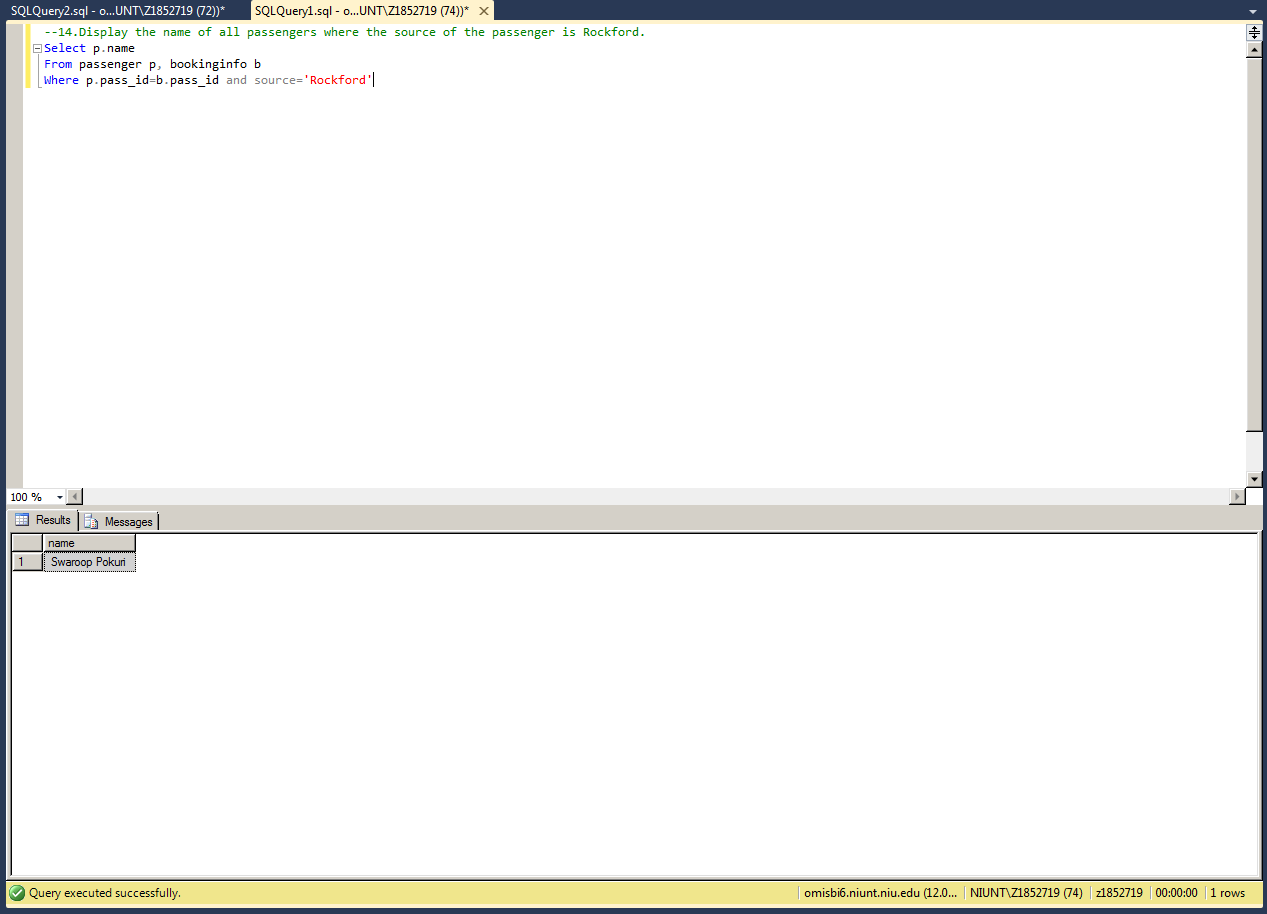
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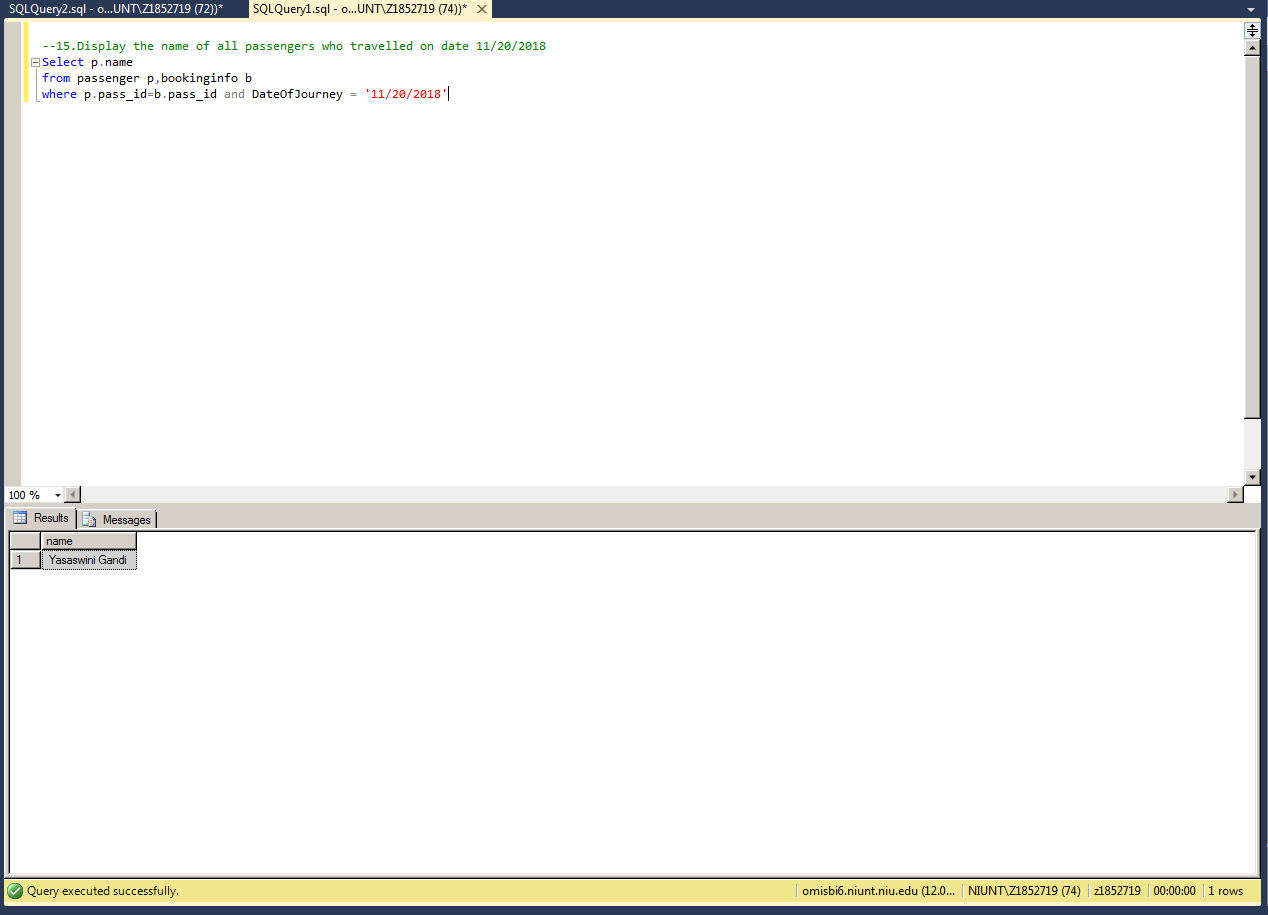
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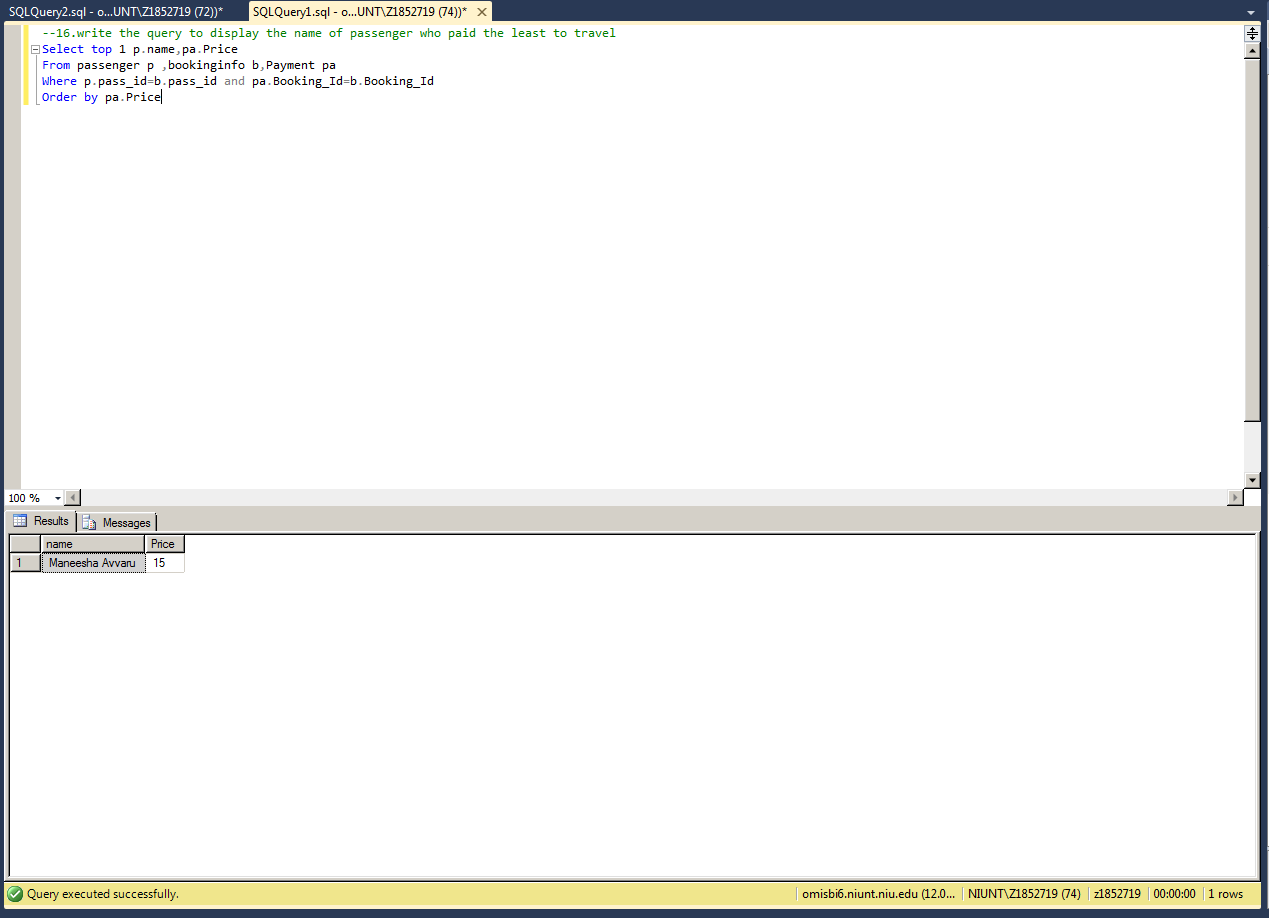
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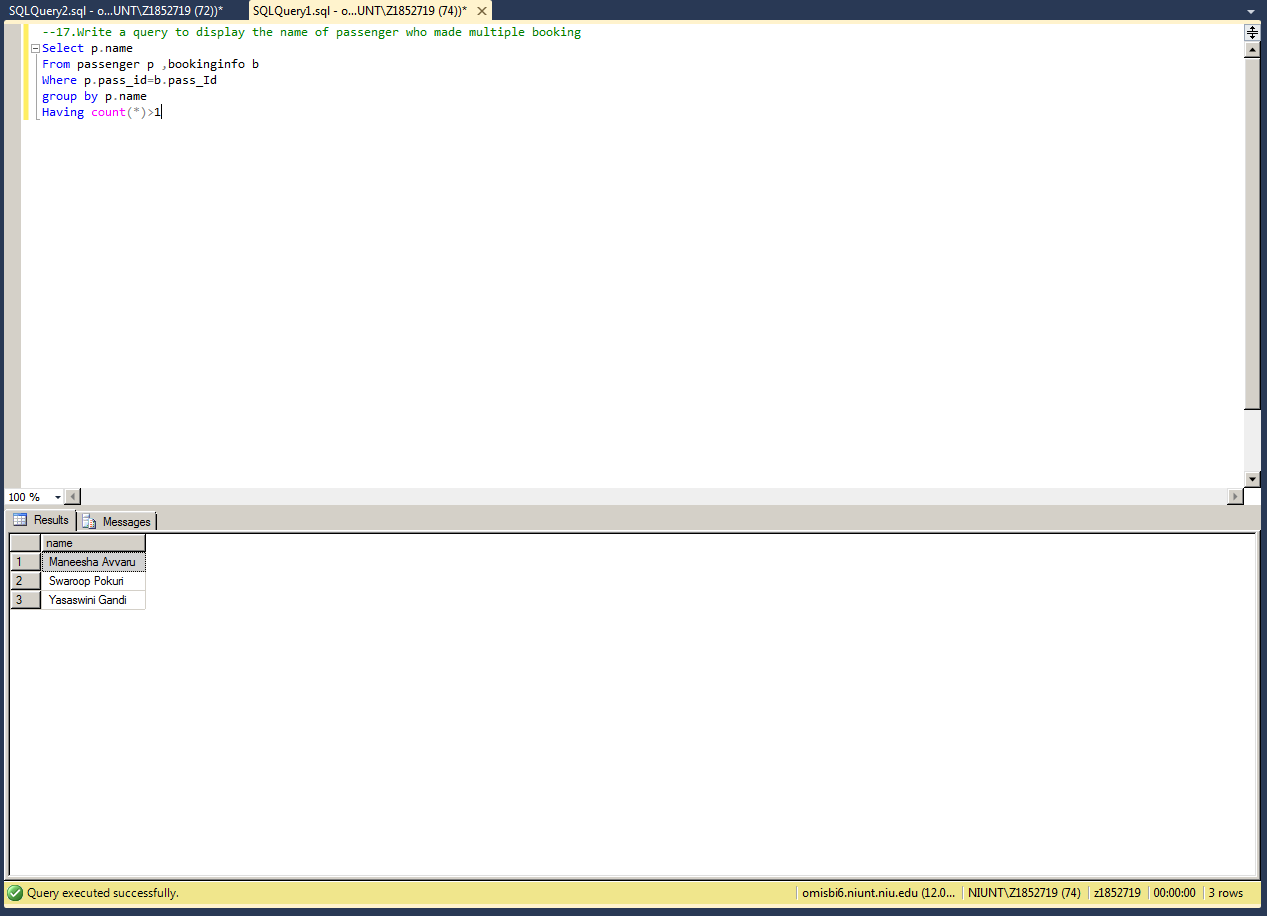
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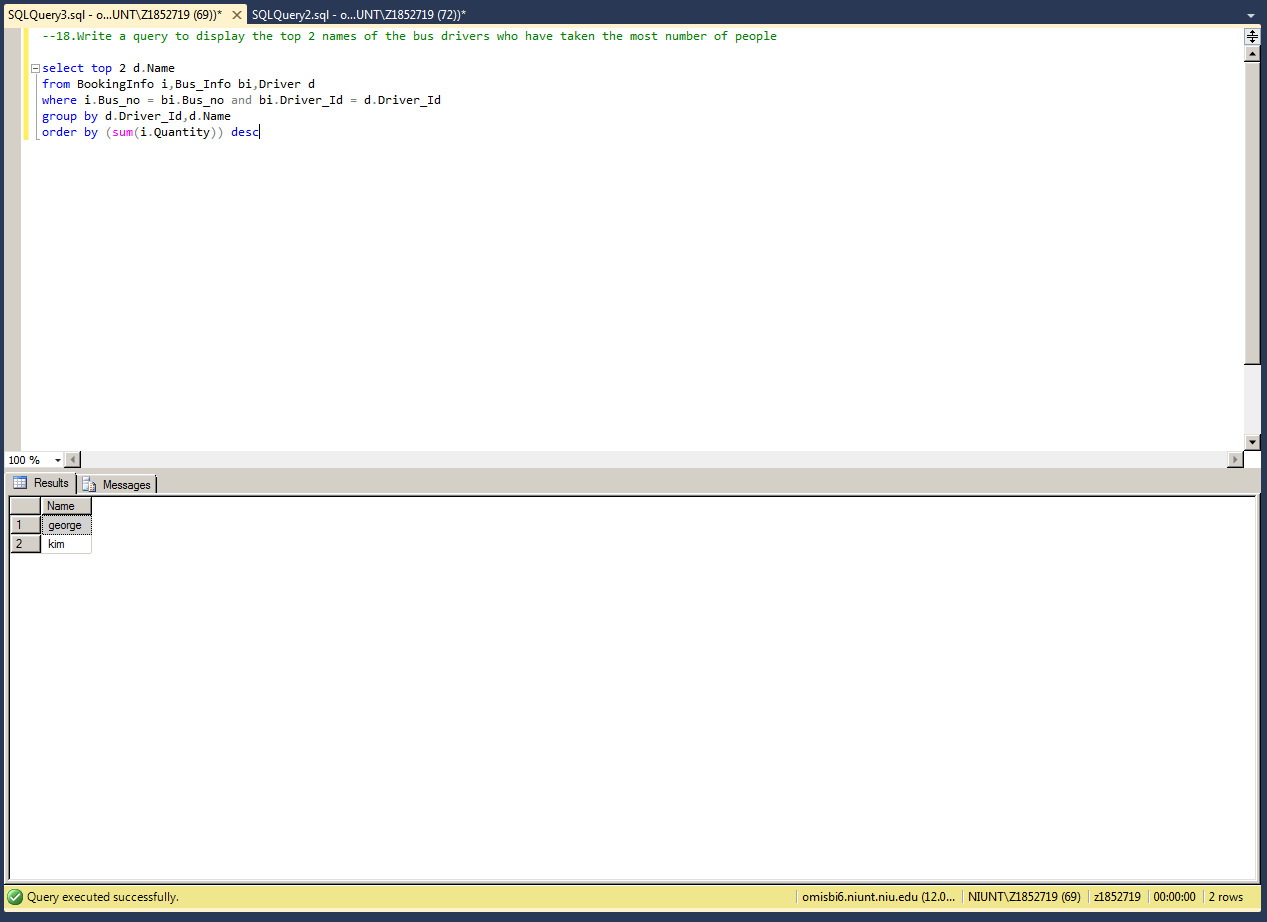
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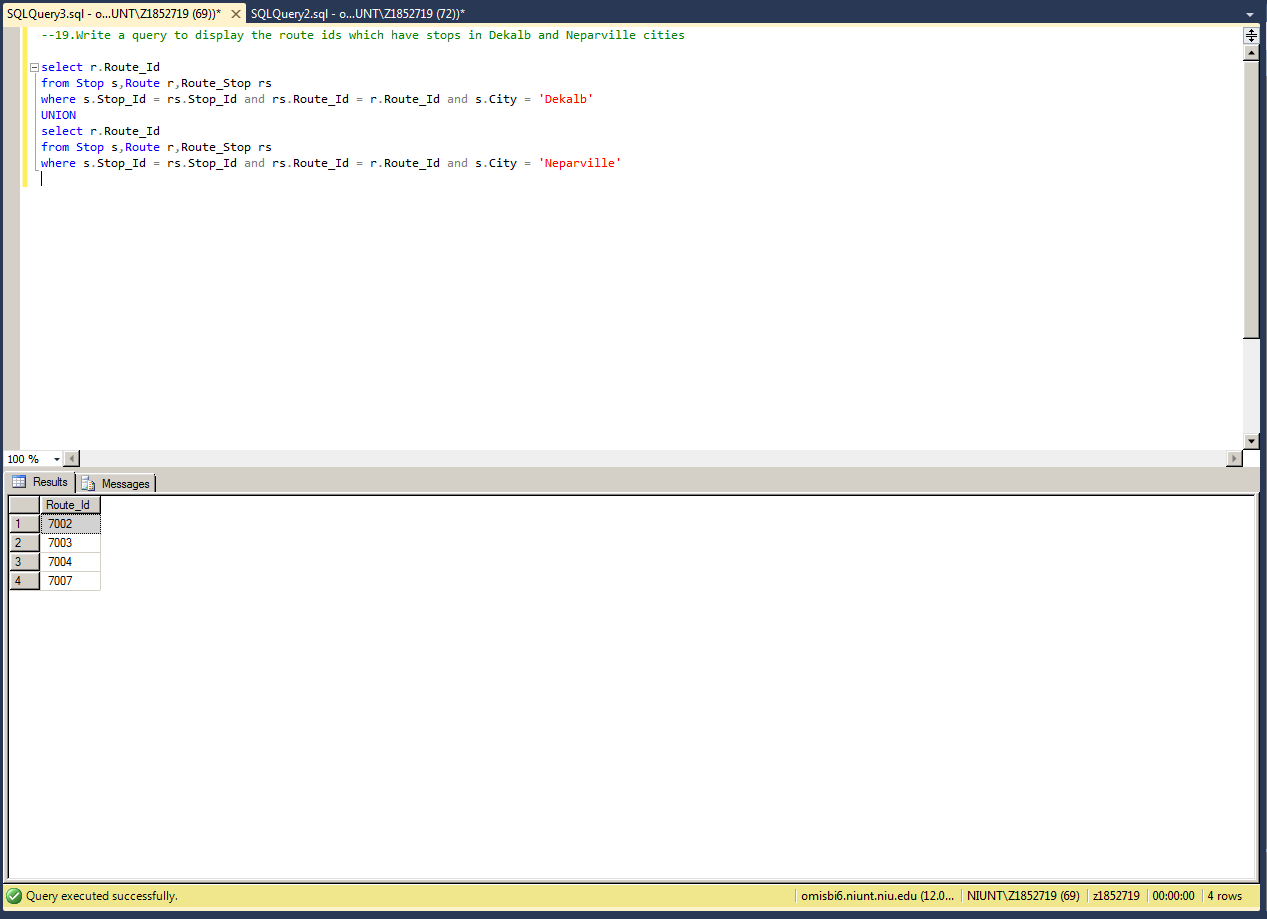
**17.**



**18.**



**19.**



**20.**

