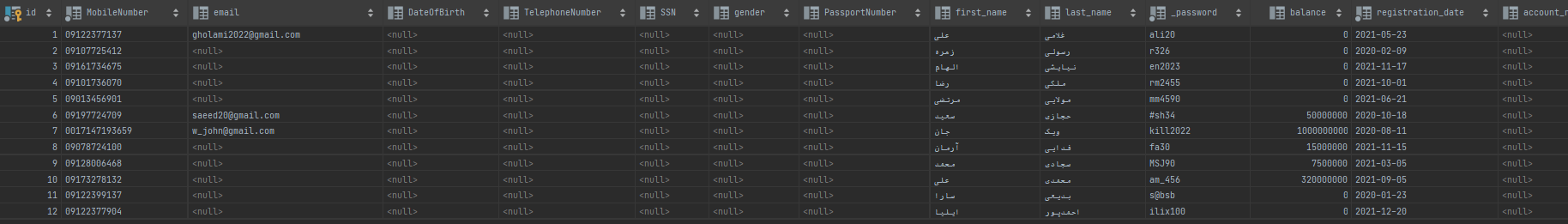
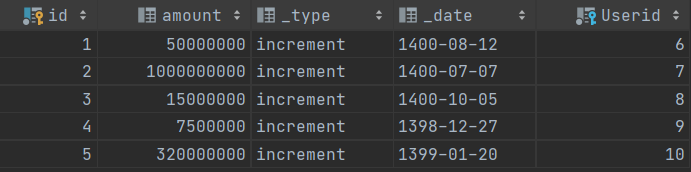
* **دستورات Update و Insert**

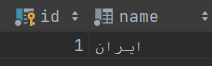
INSERT INTO \_user (MobileNumber, first\_name, last\_name, \_password,balance, registration\_date)  
VALUES  
('09122377137',N'علی', N'غلامی', 'ali20',0, '2021-05-23'), --1  
('09107725412' ,N'زهره', N'رسولی', 'r326',0, '2020-02-09'), --2  
('09161734675',N'الهام', N'نیایشی', 'en2023',0, '2021-11-17'), --3  
('09101736070',N'رضا', N'ملکی', 'rm2455',0, '2021-10-01'), --4  
('09013456901',N'مرتضی', N'مولایی','mm4590', 0, '2021-06-21'), --5  
('09197724709',N'سعید', N'حجازی', '#sh34',50000000, '2020-10-18'), --6  
('0017147193659',N'جان', N'ویک','kill2022',1000000000,'2020-08-11'), --7  
('09078724100',N'آرمان', N'فدایی', 'fa30',15000000, '2021-11-15'), --8  
('09128006468',N'محمد', N'سجادی', 'MSJ90',7500000, '2021-03-05'), --9  
('09173278132',N'علی', N'محمدی', 'am\_456',320000000, '2021-09-05'); --10  
  
INSERT INTO \_user (MobileNumber, first\_name, last\_name, \_password,balance, registration\_date)  
VALUES  
('09122399137',N'سارا', N'بدیعی', 's@bsb',0, '2020-01-23'), --11  
('09122377904',N'ایلیا', N'احمدپور', 'ilix100',0, '2021-12-20'); --12  
  
UPDATE \_user  
SET email = 'gholami2022@gmail.com'  
WHERE id = 1  
  
UPDATE \_user  
SET email = 'saeed20@gmail.com'  
WHERE id = 6  
  
UPDATE \_user  
SET email = 'w\_john@gmail.com'  
WHERE id = 7



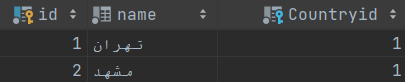
INSERT INTO Transactions (amount, \_type, \_date, userid)  
VALUES  
(50000000, 'increment', '1400/08/12', 6),  
(1000000000, 'increment', '1400/07/07',7),  
(15000000, 'increment', '1400/10/05', 8),  
(7500000, 'increment', '1398/12/27', 9),  
(320000000, 'increment', '1399/01/20', 10);



INSERT INTO country (name)  
VALUES  
(N'ایران'); --1



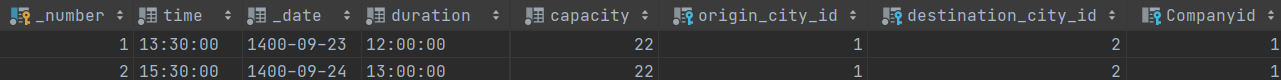
INSERT INTO City (name, countryid)  
VALUES  
(N'تهران', 1), --1  
(N'مشهد', 1); --2



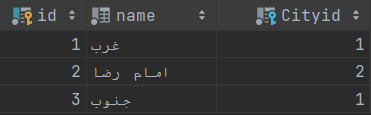
INSERT INTO Company (name)  
VALUES  
(N'ایران پیما');



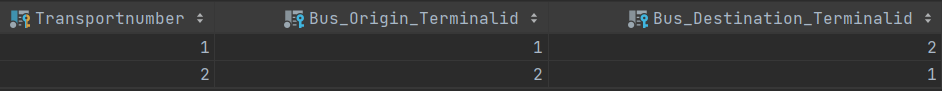
INSERT INTO Transport (time, \_date, duration, capacity, origin\_city\_id, destination\_city\_id, Companyid)  
VALUES  
('13:30', '1400/09/23', '12:00', 22, 1, 2, 1), --1  
('15:30', '1400/09/24', '13:00', 22, 1, 2, 1); --2



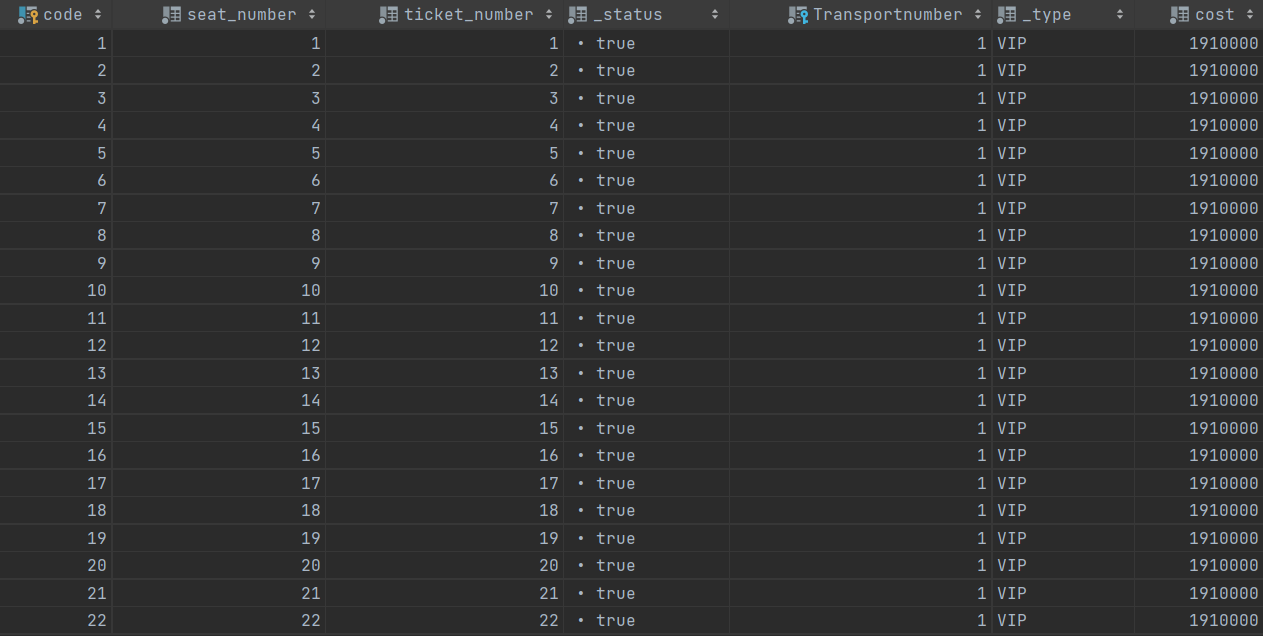
INSERT INTO Bus\_Terminal (name, cityid)  
VALUES  
(N'غرب', 1),  
(N'امام رضا', 2),  
(N'جنوب', 1);



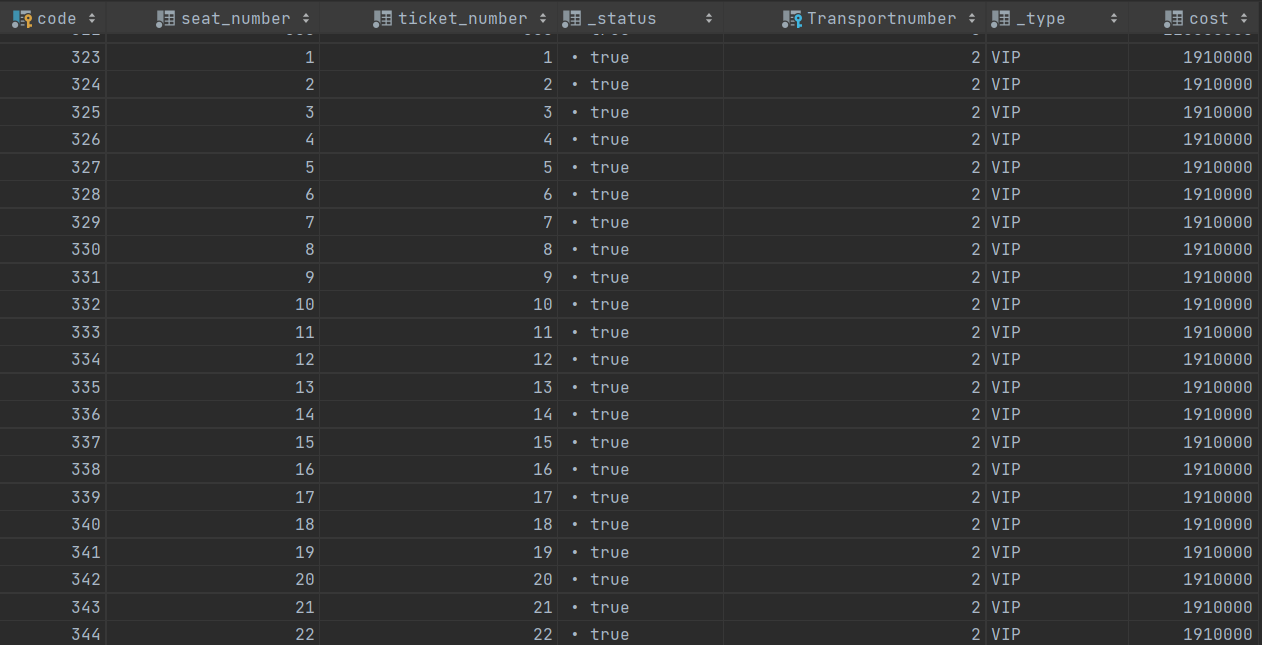
INSERT INTO Bus (transportnumber,bus\_origin\_terminalid, bus\_destination\_terminalid)  
VALUES  
(1, 1, 2),  
(2, 2, 1);



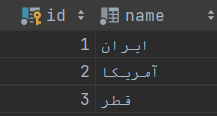
BEGIN  
 DECLARE @num int  
 DECLARE @count int  
 SET @num = 1  
 SET @count = 1  
WHILE @count <= 22  
 BEGIN  
 INSERT INTO Ticket (seat\_number,ticket\_number ,\_status, Transportnumber, cost, \_type)  
 VALUES (@num , @num, 1, 1,'1910000', 'VIP')  
 SET @count = @count + 1  
 SET @num = @num + 1  
 END  
END;



BEGIN  
 DECLARE @num int  
 DECLARE @count int  
 SET @num = 1  
 SET @count = 1  
 WHILE @count <= 22  
 BEGIN  
 INSERT INTO Ticket (seat\_number,ticket\_number ,\_status, Transportnumber, cost, \_type)  
 VALUES (@num , @num, 1, 2,'1910000', 'VIP')  
 SET @count = @count + 1  
 SET @num = @num + 1  
 END  
END;



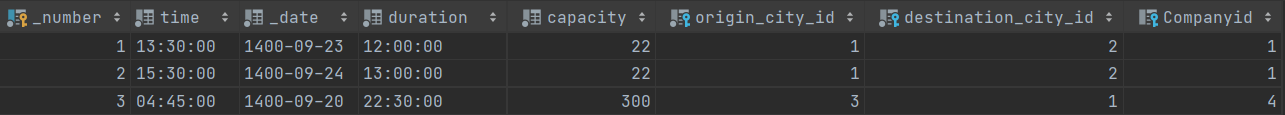
INSERT INTO country (name)  
VALUES  
(N'آمریکا'), --2  
(N'قطر'); --3



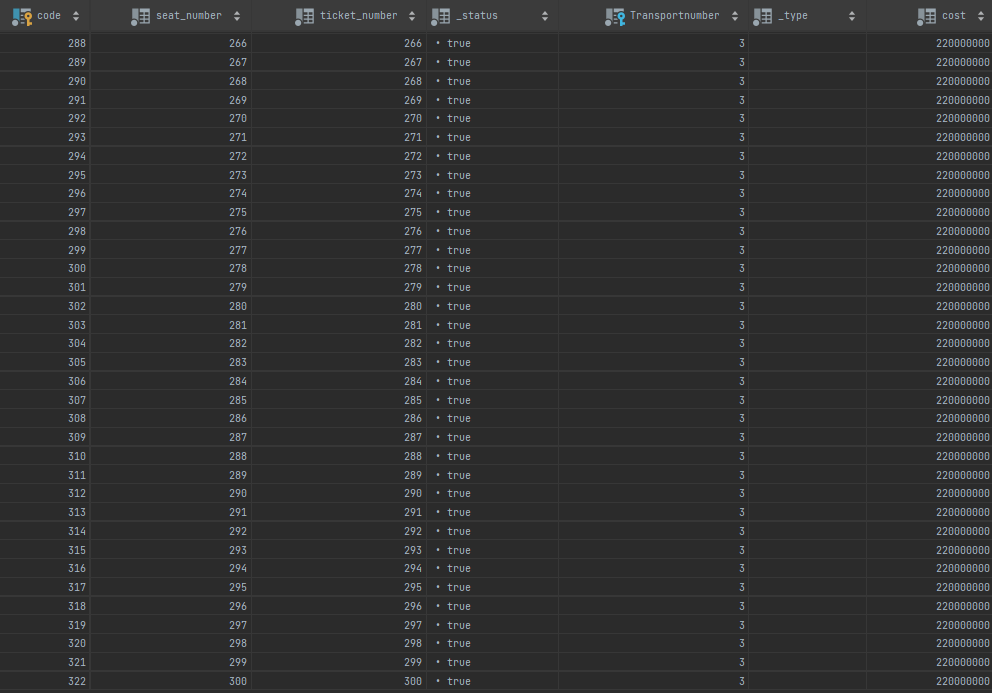
INSERT INTO city (name, countryid)  
VALUES  
(N'لس آنجلس', 2), --3  
(N'دوحه', 3), --4  
(N'سانفرانسیسکو', 2); --5



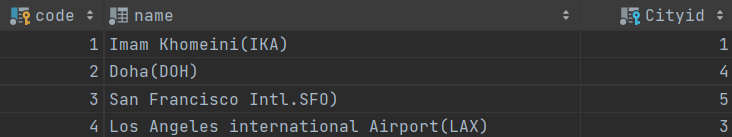
INSERT INTO transport (time, \_date, duration, capacity, origin\_city\_id, destination\_city\_id, Companyid)  
VALUES  
('4:45', '1400/09/20', '22:30', 300, 3, 1, 4); --3



BEGIN  
 DECLARE @num int  
 DECLARE @count int  
 SET @num = 1  
 SET @count = 1  
 WHILE @count <= 300  
 BEGIN  
 INSERT INTO Ticket (seat\_number,ticket\_number ,\_status, Transportnumber, cost, \_type)  
 VALUES (@num , @num, 1, 3, 220000000, '')  
 SET @count = @count + 1  
 SET @num = @num + 1  
 END  
END;



INSERT INTO airport (name, cityid)  
VALUES  
('Imam Khomeini(IKA)', 1), --1  
('Doha(DOH)', 4), --2  
('San Francisco Intl.SFO)', 5), --3  
('Los Angeles international Airport(LAX)', 3); --4



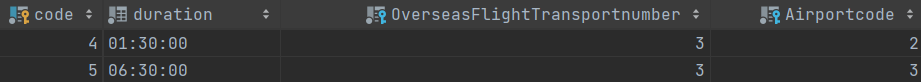
INSERT INTO flight (transportnumber, class, amount\_of\_allowed\_baggage, Airportcode\_origin, Airportcode\_destination)  
VALUES  
(3, N'اکونومی', 23, 3, 1);



INSERT INTO Overseas (FlightTransportnumber)  
VALUES (3)



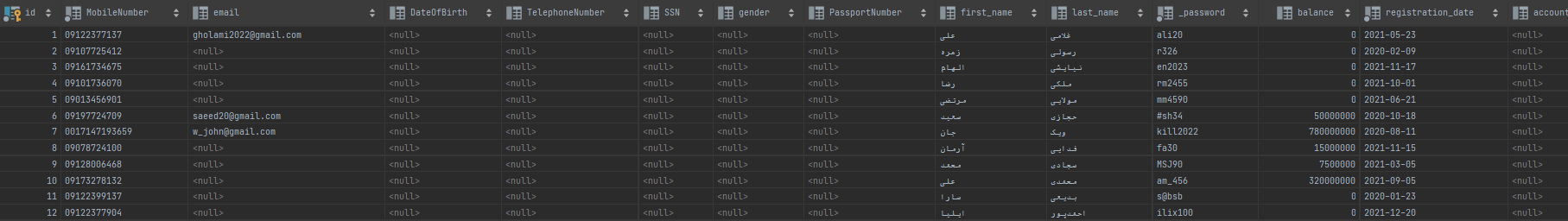
INSERT INTO flight\_legs (duration, OverseasFlightTransportnumber, Airportcode)  
VALUES  
('1:30', 3, 2),  
('6:30', 3, 3);



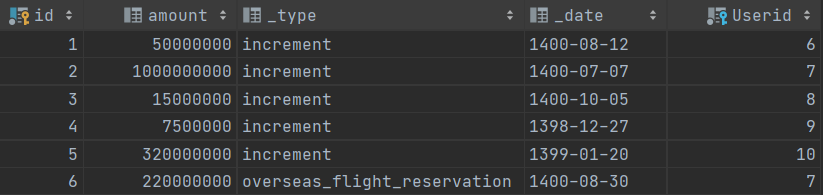
INSERT INTO transport\_reservation (\_date, number\_of\_adult, number\_of\_children, userid, Ticketcode)  
VALUES  
('1400/08/30', 1, 0, 7, 3);



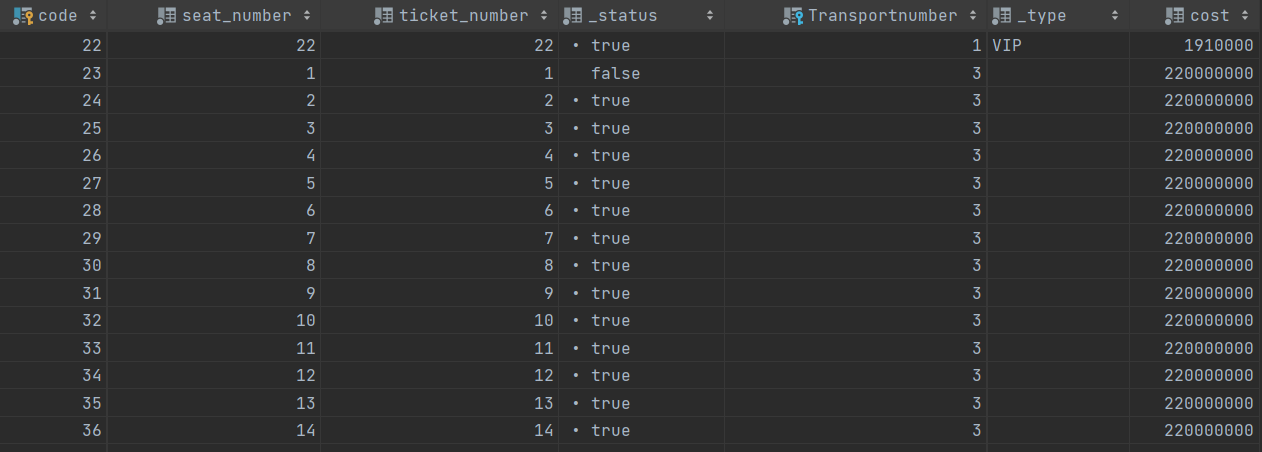
UPDATE \_user  
SET balance = balance - (SELECT cost FROM ticket WHERE Transportnumber = 3 and ticket\_number = 1)  
WHERE id = 7;



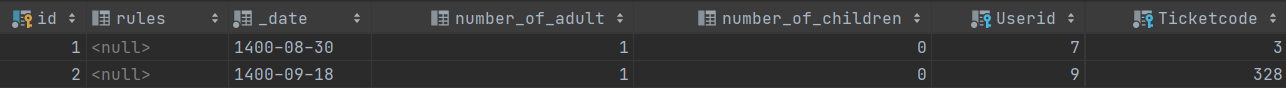
INSERT INTO transactions (amount, \_type, \_date, userid)  
VALUES  
((SELECT cost FROM ticket WHERE Transportnumber = 3 and ticket\_number = 1),'overseas\_flight\_reservation', '1400/08/30', 7);



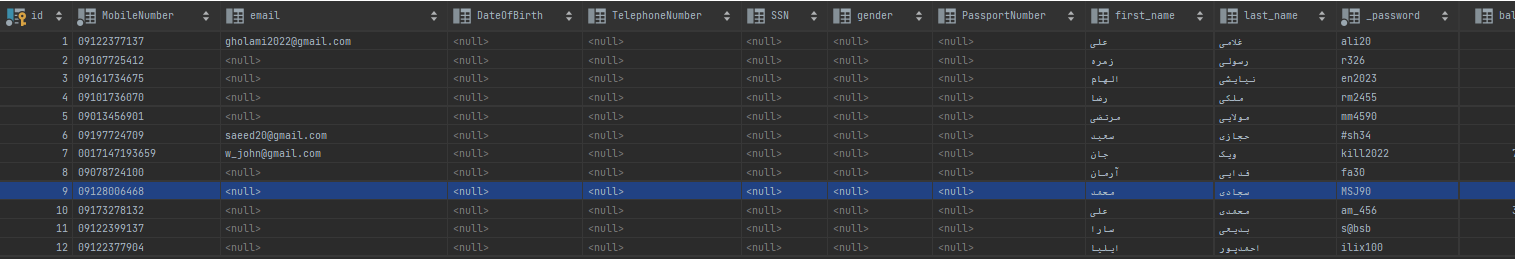
UPDATE Ticket  
SET \_status = 0  
WHERE ticket\_number = 1 and transportnumber = 3;



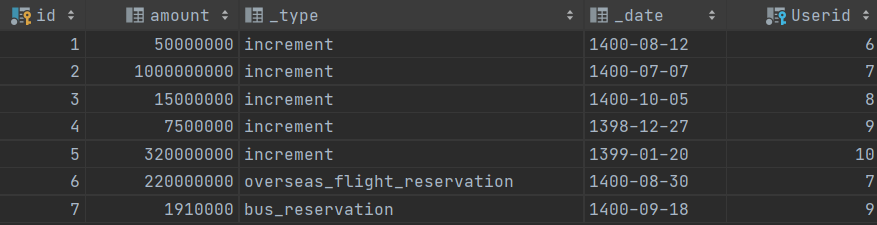
INSERT INTO transport\_reservation (\_date, number\_of\_adult, number\_of\_children, userid, Ticketcode)  
VALUES  
('1400/09/18', 1, 0, 9, 328);



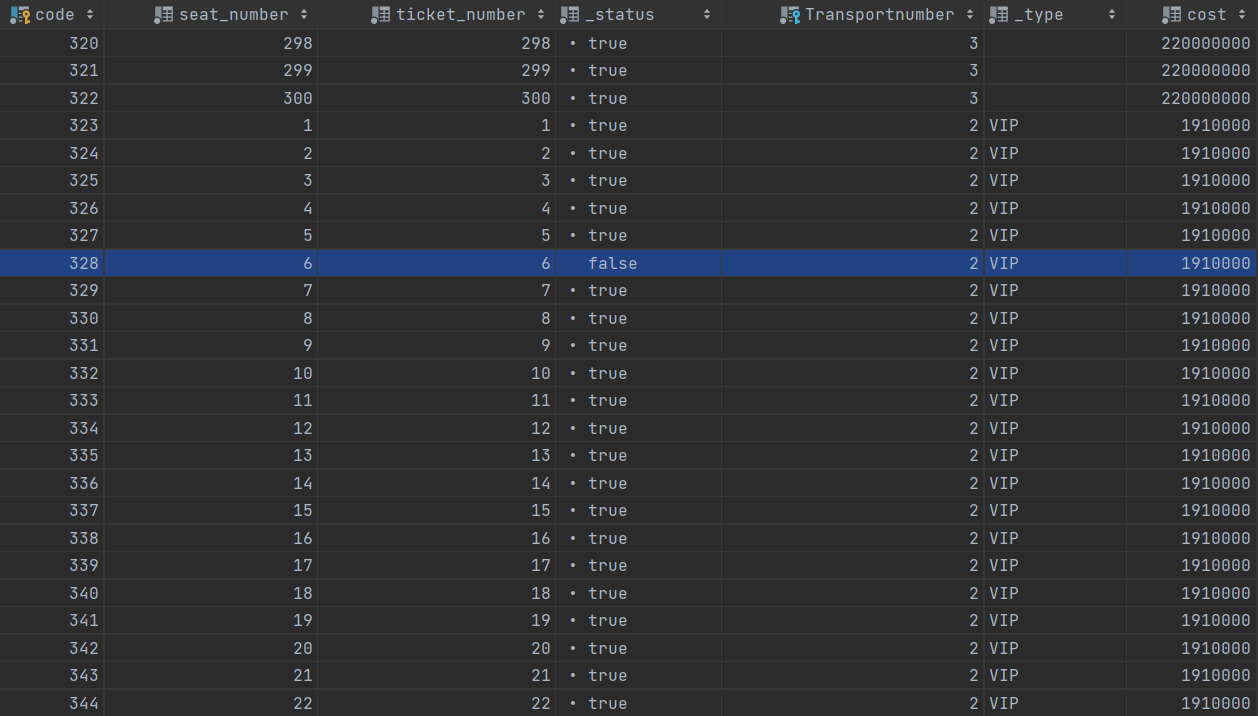
UPDATE \_user  
SET balance = balance - (SELECT cost FROM ticket WHERE code = 328)  
 WHERE id = 9;



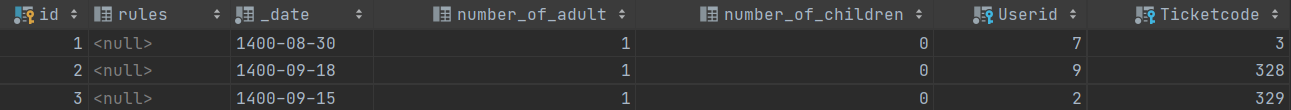
INSERT INTO transactions (amount, \_type, \_date, userid)  
VALUES  
((SELECT cost FROM ticket WHERE code = 328),'bus\_reservation', '1400/09/18', 9);



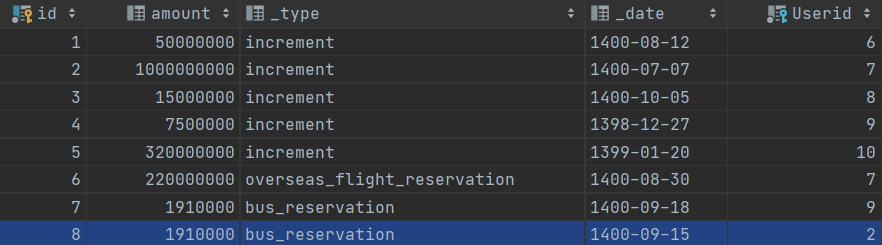
UPDATE Ticket  
SET \_status = 0 where code = 328;



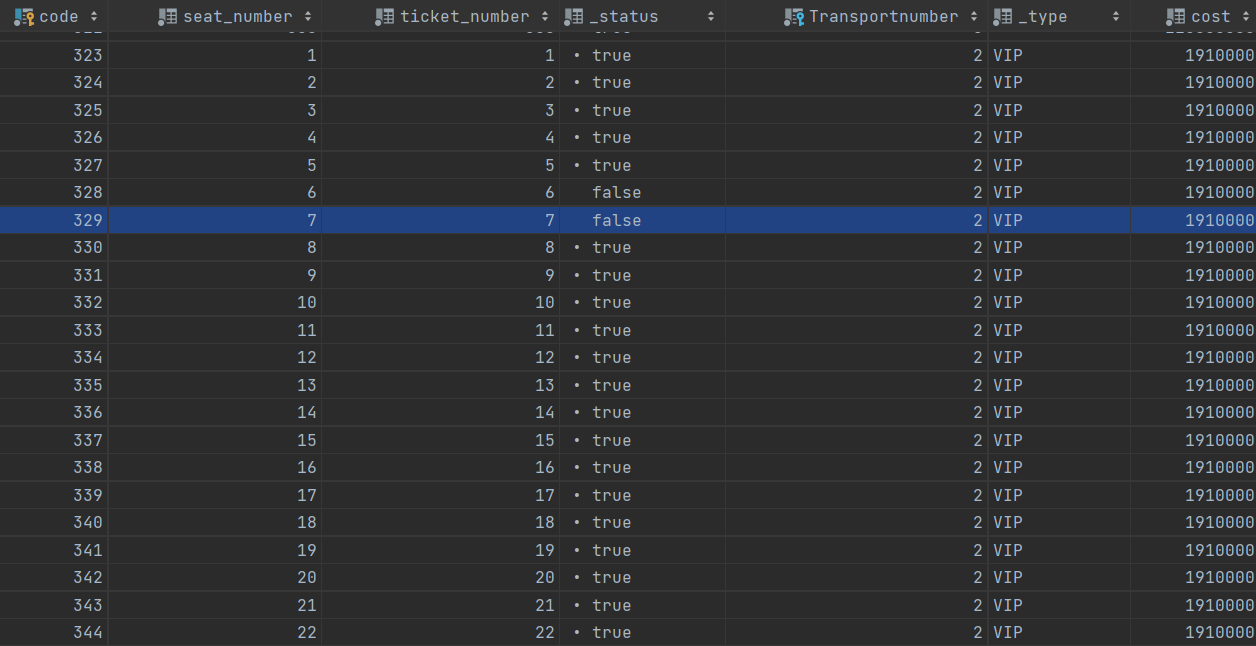
INSERT INTO transport\_reservation (\_date, number\_of\_adult, number\_of\_children, userid, Ticketcode)  
VALUES  
('1400/09/15', 1, 0, 2, 329);



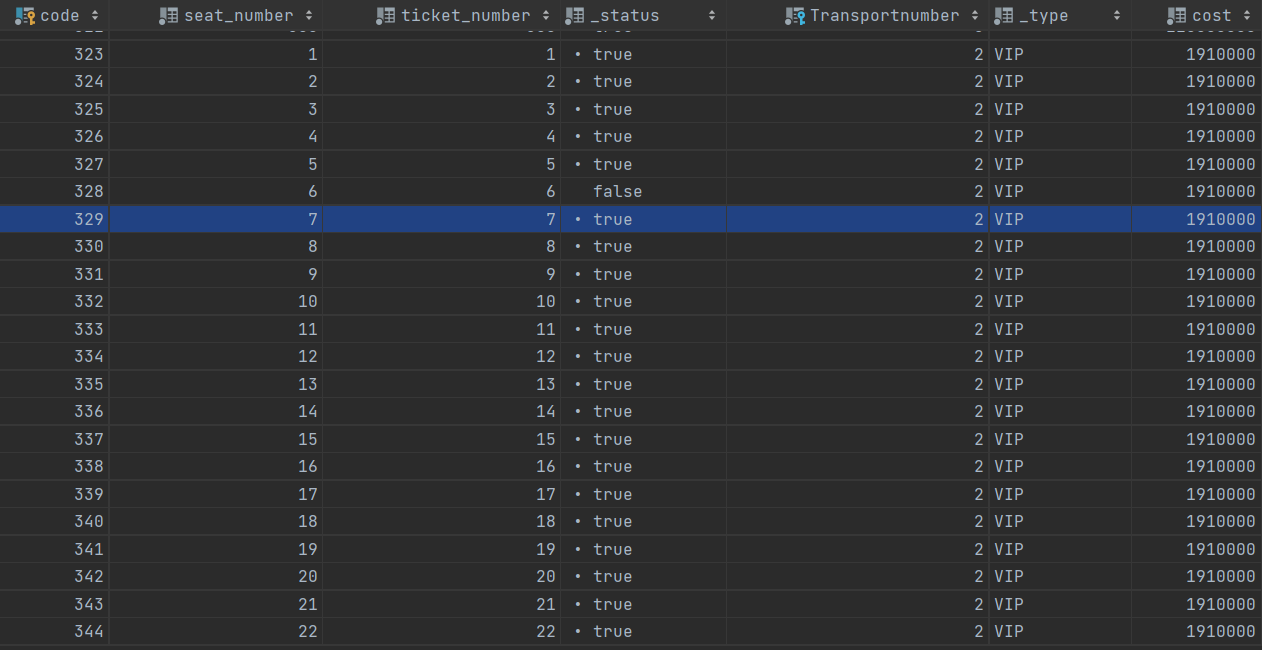
INSERT INTO transactions (amount, \_type, \_date, userid)  
VALUES ((SELECT cost FROM ticket WHERE code = 329),'bus\_reservation', '1400/09/15', 2);



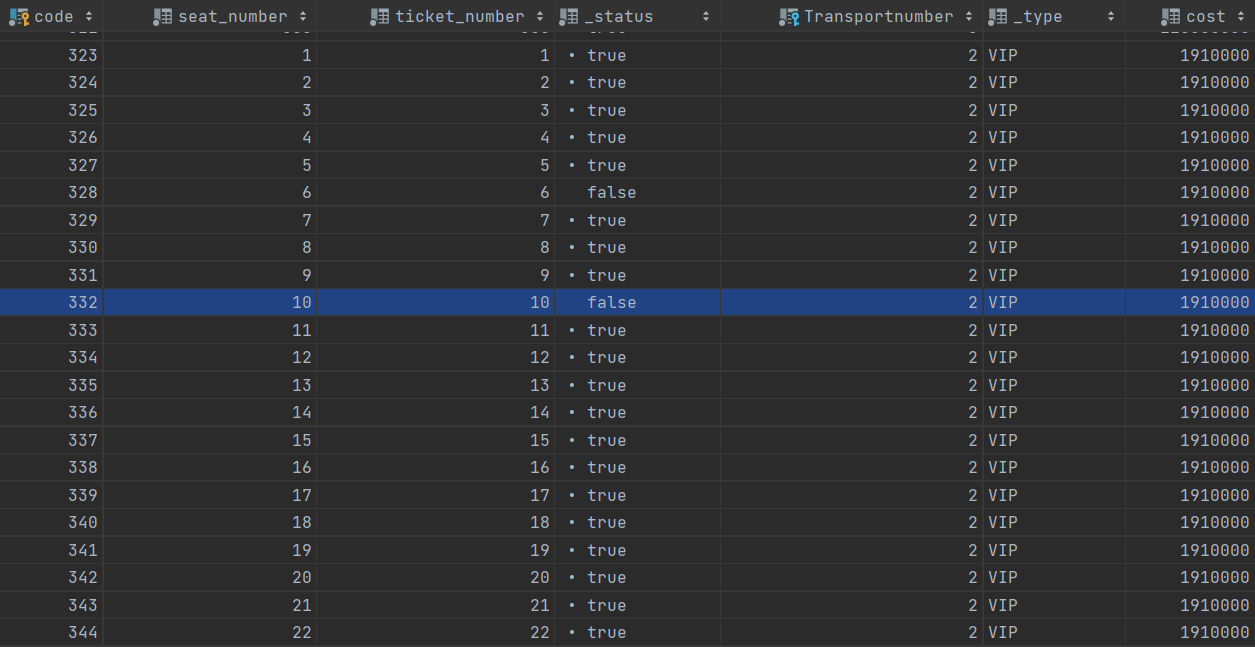
UPDATE Ticket  
SET \_status = 0 WHERE code = 329



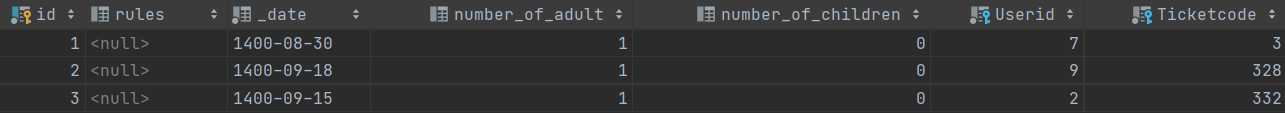
UPDATE Ticket  
SET \_status = 1 WHERE seat\_number = 7 and transportnumber = 2;



UPDATE Ticket  
SET \_status = 0 WHERE seat\_number = 10 and transportnumber = 2;



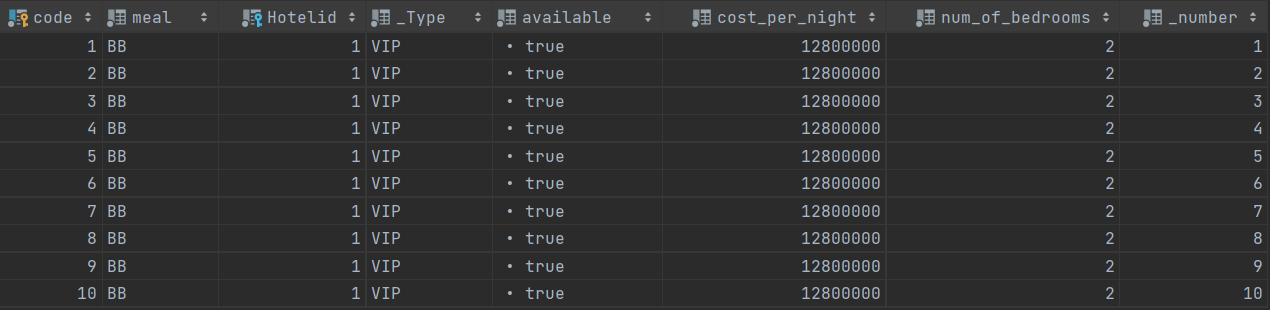
UPDATE Transport\_Reservation  
SET Ticketcode = (SELECT code FROM Ticket WHERE seat\_number = 10 and transportnumber = 2 )  
WHERE Userid = 2



INSERT INTO hotel (name, stars, cityid)  
VALUES  
(N'هتل اسپیناس', 5, 1);



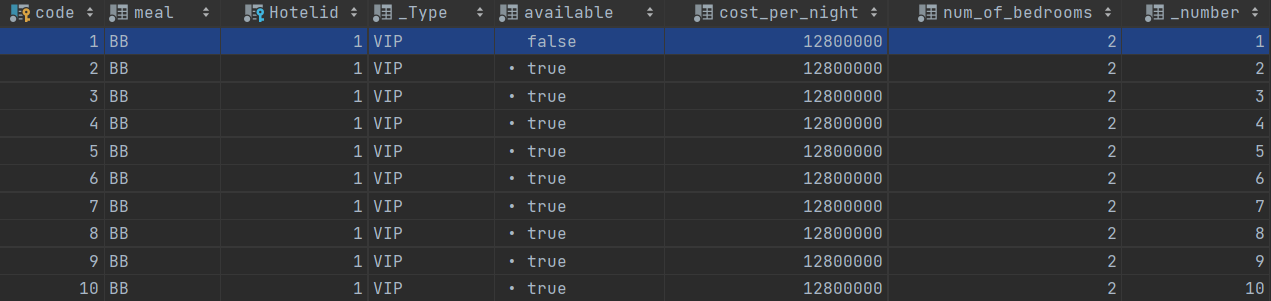
BEGIN  
DECLARE @num int  
SET @num = 1;  
WHILE @num <= 10  
 BEGIN  
 INSERT INTO room (meal, Hotelid, \_Type, available, cost\_per\_night, num\_of\_bedrooms, \_number)  
 VALUES  
 ('BB', 1, 'VIP', 1, 12800000, 2, @num)  
 SET @num = @num + 1  
 END  
END



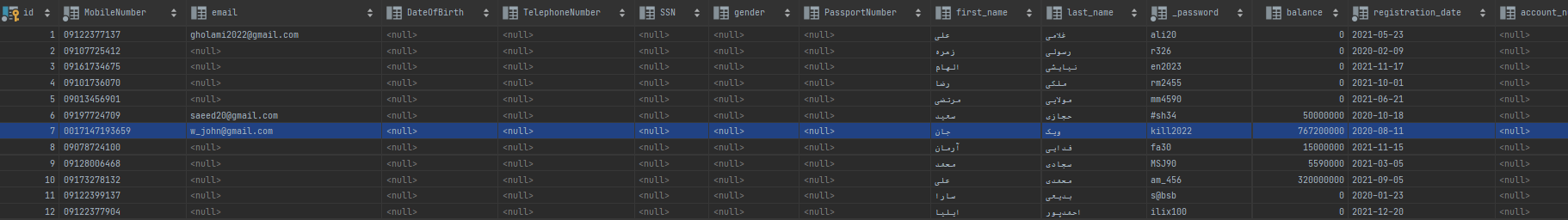
INSERT INTO hotel\_reservation (checkin\_date, checkout\_date, \_date, number\_of\_baby, number\_of\_adult, number\_of\_children, userid, Roomcode)  
VALUES  
('1400/09/20', '1400/09/21', '1400/09/01', 0, 1, 0, 7, 1);



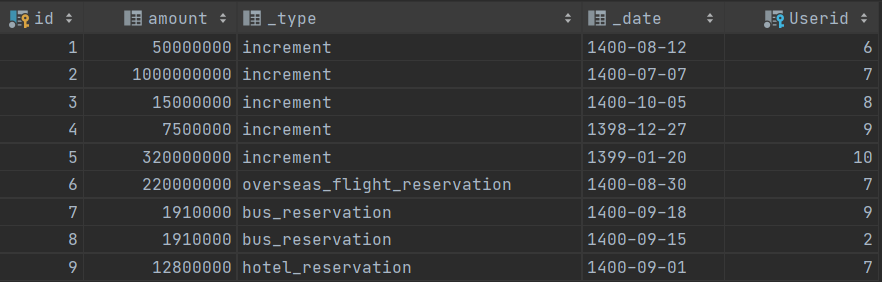
UPDATE room  
SET available = 0  
WHERE \_number = 1 and Hotelid = 1;



UPDATE \_user  
SET balance = balance - (SELECT cost\_per\_night FROM room WHERE \_number = 1 and hotelid = 1)  
WHERE id = 7;

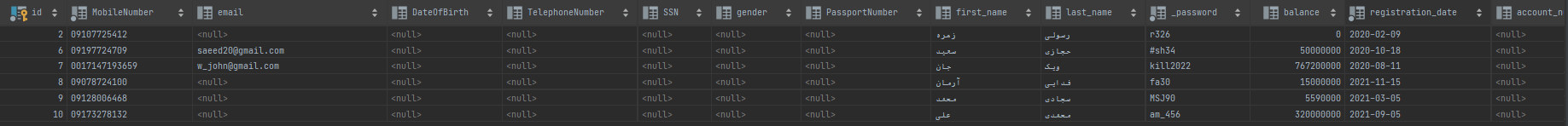


INSERT INTO transactions (amount, \_type, \_date, userid)  
VALUES ((SELECT cost\_per\_night FROM room WHERE \_number = 1 and hotelid = 1),'hotel\_reservation', '1400/09/01', 7);



* **دستور Delete**

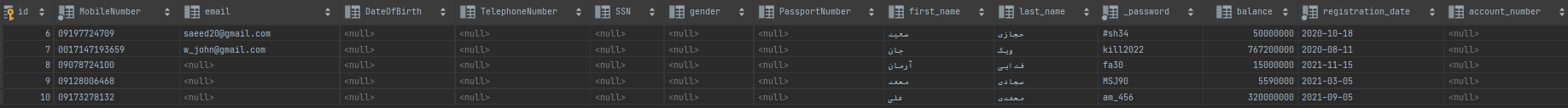
BEGIN  
DECLARE @Date DATE  
SET @Date = FORMAT(GETDATE(), 'yyyy/MM/dd', 'fa')  
DELETE from \_user  
where DATEDIFF(day, @Date, registration\_date) > 7  
and id not in (select Userid from Transactions)  
END



* **دستور Insert**

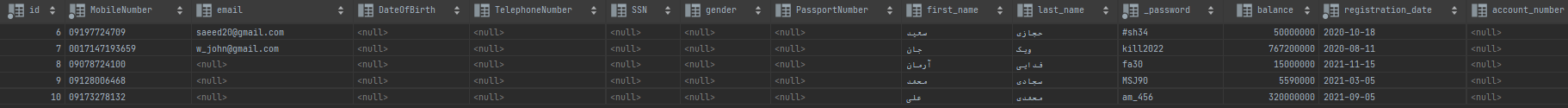
create table nzb\_user(  
id int PRIMARY KEY,  
MobileNumber nvarchar(15) NOT NULL,  
email varchar(50) NULL,  
DateOfBirth date NULL,  
TelephoneNumber nvarchar(15) NULL,  
SSN nchar(10) NULL,  
gender char(1) NULL,  
PassportNumber nchar(9) NULL,  
first\_name nvarchar(25) NULL,  
last\_name nvarchar(25) NULL,  
\_password nvarchar(50) NOT NULL,  
balance int DEFAULT 0 NULL,  
registration\_date date NOT NULL,  
account\_number nvarchar(25) NULL  
);

INSERT INTO nzb\_user  
SELECT \* FROM \_user  
WHERE balance != 0;

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* **دستور View**

CREATE VIEW nzb\_user\_v AS  
SELECT \*  
FROM nzb\_user

****

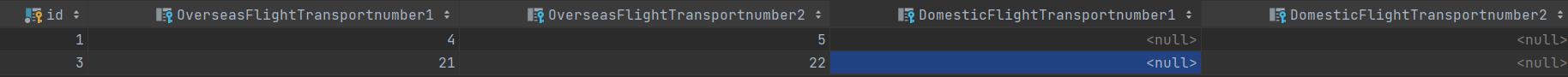
* **Stored Procedure**

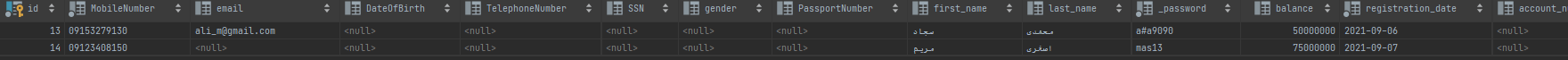
**1**

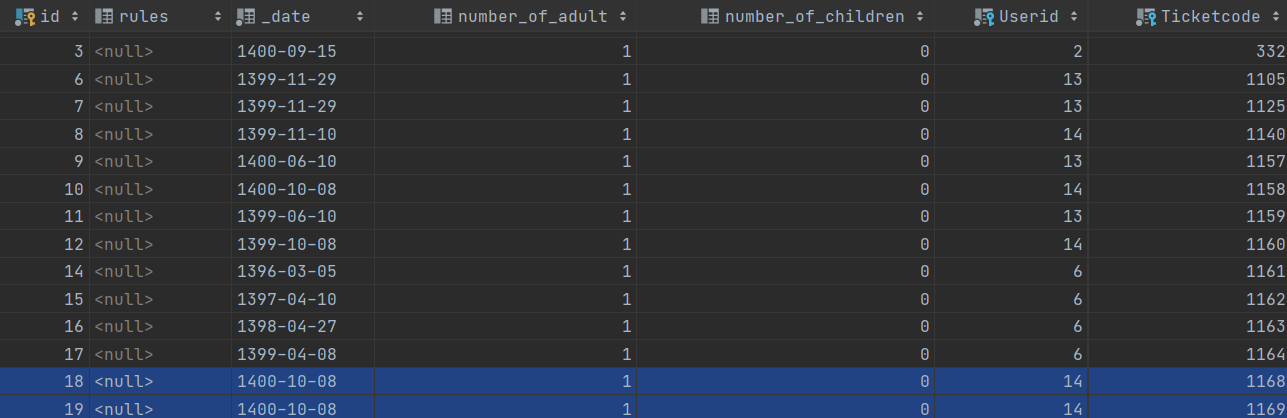
CREATE PROCEDURE *purchasedTickets* @origin nvarchar(50), @destination nvarchar(50), @X nvarchar(50)  
AS  
BEGIN  
 IF @X = N'رفت و برگشت'  
 BEGIN  
 select count(\*) as Two\_Way\_Count  
 from  
 (SELECT DISTINCT \_user.\*  
 from \_user, Transport\_Reservation  
 where \_user.id = Transport\_Reservation.Userid  
 and \_user.id in ( select TR1.Userid  
 from Transport\_Reservation TR1, Transport\_Reservation TR2, Flight F1, Flight F2, Transport T1, Transport T2, Ticket TT1, Ticket TT2, Two\_Way  
 where TR1.Ticketcode = TT1.code  
 and TR2.Ticketcode = TT2.code  
 and TT1.Transportnumber = T1.\_number  
 and TT2.Transportnumber = T2.\_number  
 and T1.\_number = F1.Transportnumber  
 and T2.\_number = F2.Transportnumber  
 and TR1.\_date = TR2.\_date  
 and T1.origin\_city\_id = T2.destination\_city\_id  
 and (Two\_Way.DomesticFlightTransportnumber1 = F1.Transportnumber  
 or Two\_Way.OverseasFlightTransportnumber1 = F1.Transportnumber  
 )  
 and (Two\_Way.DomesticFlightTransportnumber2 = F2.Transportnumber  
 or Two\_Way.OverseasFlightTransportnumber2 = F2.Transportnumber)  
 and T1.origin\_city\_id = (select City.id FROM City where City.name = @origin)  
 and T1.destination\_city\_id = (select City.id from City where City.name = @destination)  
 )) as [uTRu.\*]  
 END  
 IF @X = N'یک طرفه'  
 BEGIN  
 select count(\*) One\_Way\_Count  
 from  
 (SELECT DISTINCT \_user.\*  
 from \_user, Transport\_Reservation, Ticket  
 where Transport\_Reservation.Userid = \_user.id  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and Ticket.Transportnumber in ( select Transport.\_number  
 from Transport\_Reservation, Transport, Flight, One\_Way, Ticket  
 where Transport.\_number = Flight.Transportnumber  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and (One\_Way.OverseasFlightTransportnumber = Flight.Transportnumber  
 or One\_Way.DomesticFlightTransportnumber = Flight.Transportnumber)  
 and (Flight.Transportnumber = One\_Way.DomesticFlightTransportnumber  
 or Flight.Transportnumber = One\_Way.OverseasFlightTransportnumber)  
 and Transport.origin\_city\_id = (select City.id FROM City where City.name = @origin)  
 and Transport.destination\_city\_id = (select City.id from City where City.name = @destination)  
 )) as [uTRu.\*2]  
 END  
 IF @X = N'چند مسیره'  
 BEGIN  
select count(\*) Multi\_Way\_Count  
from  
 (SELECT DISTINCT \_user.\*  
 from \_user, Transport\_Reservation, Ticket, Flight, Transport, Multi\_Way, MultiWay\_Overseas  
 where Transport\_Reservation.Userid = \_user.id  
 and MultiWay\_Overseas.OverseasFlightTransportnumber = Flight.Transportnumber  
 and Multi\_Way.id = MultiWay\_Overseas.MultiWayid  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and Flight.Transportnumber = Ticket.Transportnumber  
 and Transport.\_number = Flight.Transportnumber  
 and \_user.id not in (select TR1.Userid  
 from Transport\_Reservation TR1, Transport\_Reservation TR2, Flight F1, Flight F2, Transport T1, Transport T2, Ticket TT1, Ticket TT2, Two\_Way  
 where TR1.Ticketcode = TT1.code  
 and TR2.Ticketcode = TT2.code  
 and TT1.Transportnumber = T1.\_number  
 and TT2.Transportnumber = T2.\_number  
 and T1.\_number = F1.Transportnumber  
 and T2.\_number = F2.Transportnumber  
 and TR1.\_date = TR2.\_date  
 and T1.origin\_city\_id = T2.destination\_city\_id  
 and (Two\_Way.DomesticFlightTransportnumber1 = F1.Transportnumber  
 or Two\_Way.OverseasFlightTransportnumber1 = F1.Transportnumber  
 )  
 and (Two\_Way.DomesticFlightTransportnumber2 = F2.Transportnumber  
 or Two\_Way.OverseasFlightTransportnumber2 = F2.Transportnumber))  
 and Ticket.Transportnumber not in (select Transport.\_number  
 from Transport\_Reservation, Transport, Flight, One\_Way, Ticket  
 where Transport.\_number = Flight.Transportnumber  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and (One\_Way.OverseasFlightTransportnumber = Flight.Transportnumber  
 or One\_Way.DomesticFlightTransportnumber = Flight.Transportnumber)  
 and (Flight.Transportnumber = One\_Way.DomesticFlightTransportnumber  
 or Flight.Transportnumber = One\_Way.OverseasFlightTransportnumber))  
 and Transport.origin\_city\_id = (select City.id FROM City where City.name = @origin)  
 and Transport.destination\_city\_id = (select City.id from City where City.name = @destination)  
 ) as [uTRu.\*3]  
 END  
END

EXEC *purchasedTickets* @origin = N'تهران', @destination = N'نجف', @X = N'رفت و برگشت';

****

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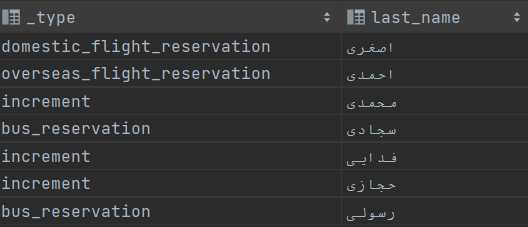
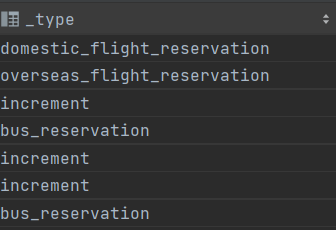
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**2**

CREATE PROCEDURE *userWalletDetail* @A nchar(1)  
AS  
SELECT transactions.\_type  
FROM \_user, transactions  
where \_user.id = Transactions.Userid  
 and \_user.last\_name like '%'+ @A  
 and Transactions.\_date = (SELECT max(\_date) from Transactions where \_user.id = Transactions.Userid)

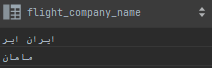
EXEC *userWalletDetail* @A = N'ی'

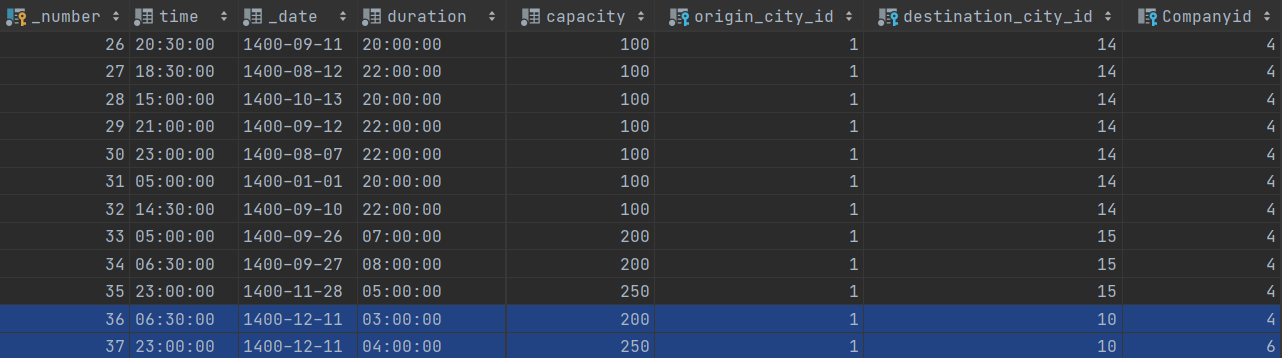
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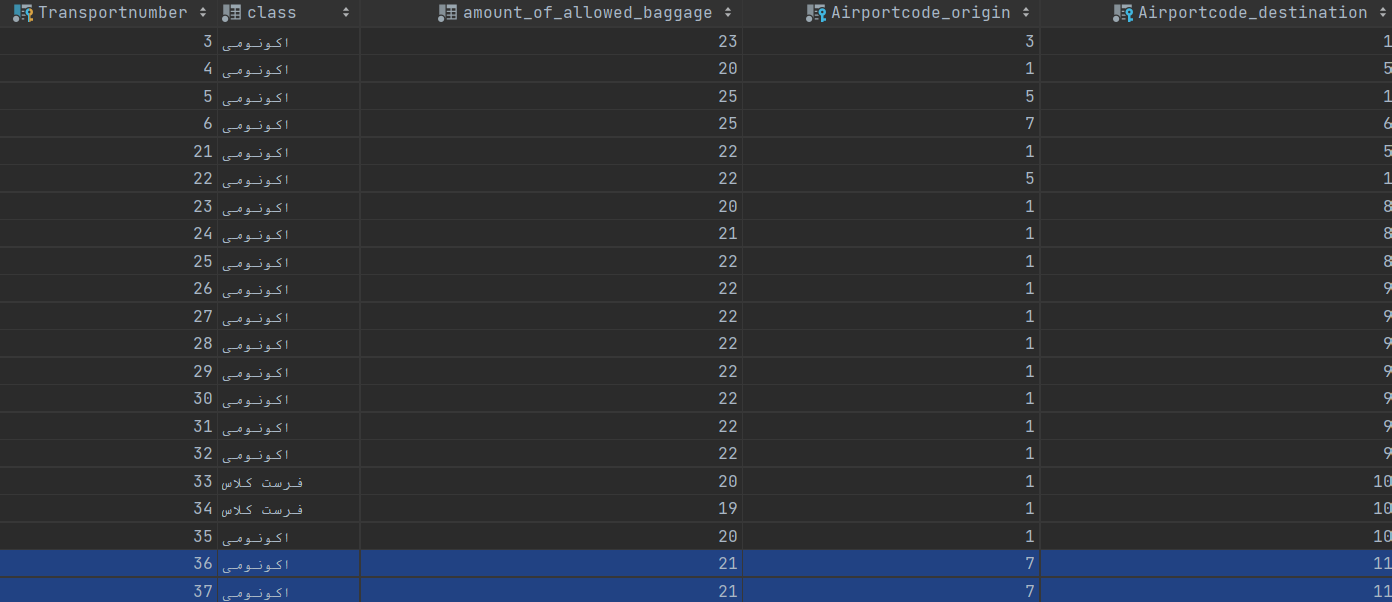
3

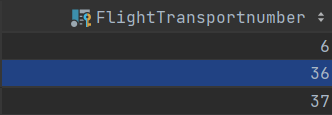
CREATE PROCEDURE *allDomesticFlights* @origin nvarchar(50), @destination nvarchar(50), @date nvarchar(50)  
AS  
SELECT distinct company.name as flight\_company\_name  
FROM transport, Company, flight, domestic  
where Transport.\_number = Flight.Transportnumber  
and Domestic.FlightTransportnumber = Flight.Transportnumber  
and Transport.Companyid = Company.id  
and Transport.origin\_city\_id = (select City.id from City where City.name = @origin)  
and Transport.destination\_city\_id = (select City.id from City where City.name = @destination)  
and Transport.\_date = @date

EXEC *allDomesticFlights* @origin = N'تهران', @destination = N'کیش', @date = '1400/12/11';





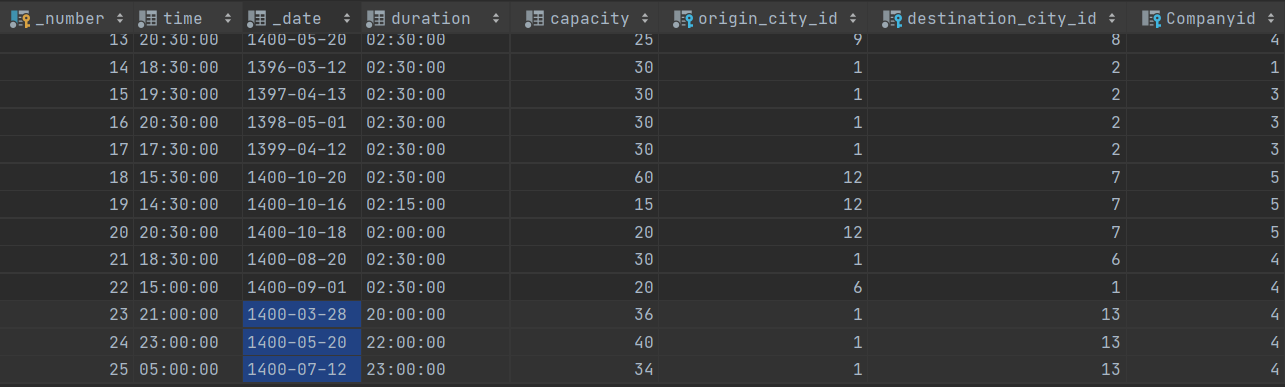


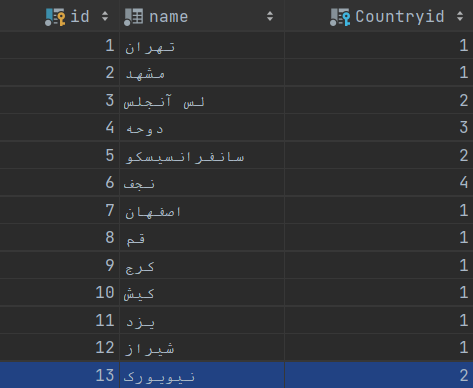


4

CREATE PROCEDURE *internationalTickets* @origin nvarchar(50), @destination nvarchar(50), @c int  
AS  
select avg(len(last\_name)) as last\_name\_average  
from \_user  
where \_user.id in  
(select \_user.id  
from \_user, Transport\_Reservation, Transport, Flight, Overseas, Ticket  
where \_user.id = Transport\_Reservation.Userid  
and Transport\_Reservation.Ticketcode = Ticket.code  
and Ticket.Transportnumber = Transport.\_number  
and Transport.\_number = Flight.Transportnumber  
and Flight.Transportnumber = Overseas.FlightTransportnumber  
and Transport.origin\_city\_id = (select City.id from City where City.name = @origin)  
and Transport.destination\_city\_id = (select City.id from City where City.name = @destination)  
group by \_user.id  
having count(\*) > @c)

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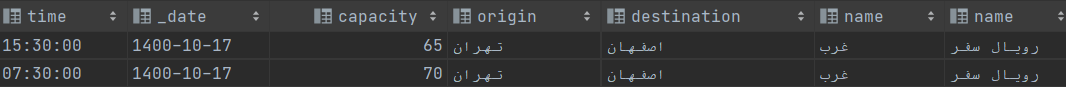
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**5**

CREATE PROCEDURE *terminalBuses* @terminal nvarchar(50), @origin nvarchar(50), @destination nvarchar(50), @company\_name nvarchar(50), @date date  
AS  
SELECT DISTINCT Transport.time, Transport.\_date, Transport.capacity, c1.name as origin, c2.name as destination ,Bus\_Terminal.name,Company.name  
FROM \_user, transport\_reservation, transport, bus, company,bus\_terminal, city c1, city c2  
where \_user.id = transport\_reservation.userid  
 and transport.\_number = bus.transportnumber  
 and bus.Bus\_Origin\_Terminalid = bus\_terminal.id  
 and Transport.companyid = company.id  
 and transport.origin\_city\_id = c1.id  
 and transport.destination\_city\_id = c2.id  
 and bus\_terminal.name = @terminal  
 and c1.name = @origin  
 and c2.name = @destination  
 and company.name = @company\_name  
 and transport.\_date = @date

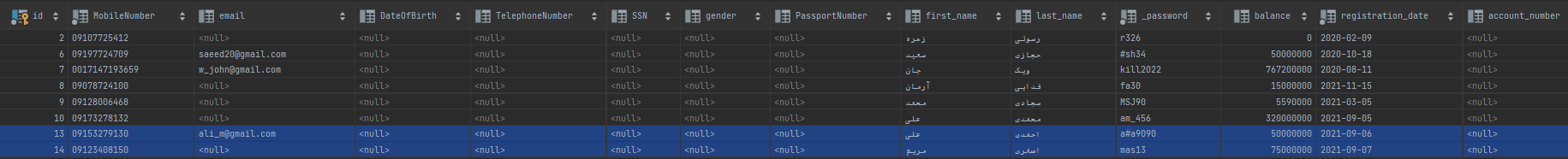
EXEC *terminalBuses* @terminal = N'غرب' , @origin = N'تهران', @destination = N'اصفهان', @company\_name = N'رویال سفر', @date = '1400/10/17';

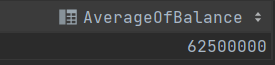
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6

CREATE PROCEDURE *hotelOrBusUsers* @A int, @city nvarchar(50)  
AS  
SELECT avg(balance) as AverageOfBalance  
from \_user  
where \_user.id in (SELECT \_user.id  
 FROM \_user, transport\_reservation, transport, bus, hotel\_reservation, Hotel, Room, Ticket  
 where \_user.id = transport\_reservation.userid  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and Ticket.Transportnumber = Transport.\_number  
 and transport.\_number = bus.transportnumber  
 and Hotel\_Reservation.Userid = \_user.id  
 and Hotel\_Reservation.Roomcode = Room.code  
 and Room.Hotelid = Hotel.id  
 and transport.origin\_city\_id = (select City.id from City where City.name = @city)  
 group by \_user.id  
 having count(\*) >= @A)

EXEC *hotelOrBusUsers* @A = 2, @city = N'تهران'

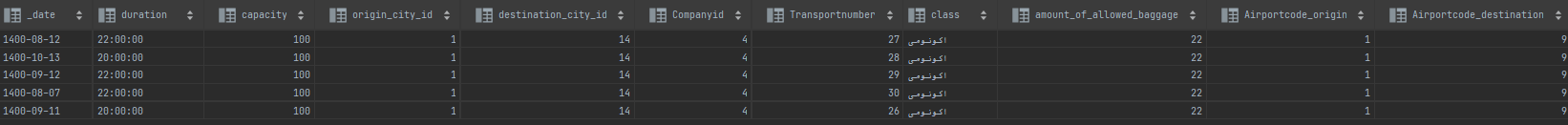
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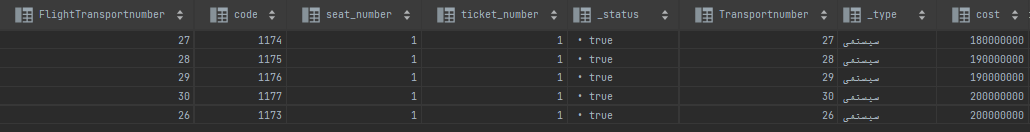
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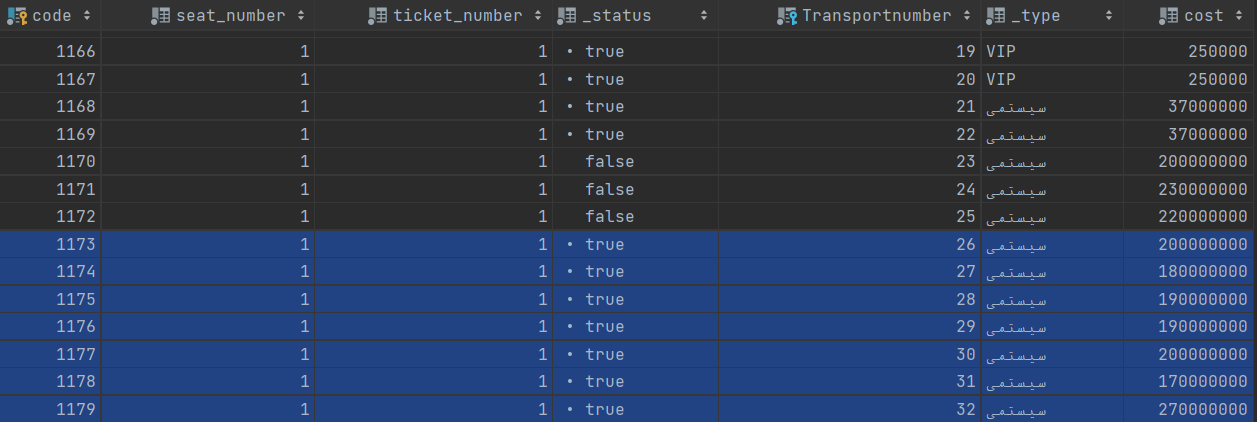
7

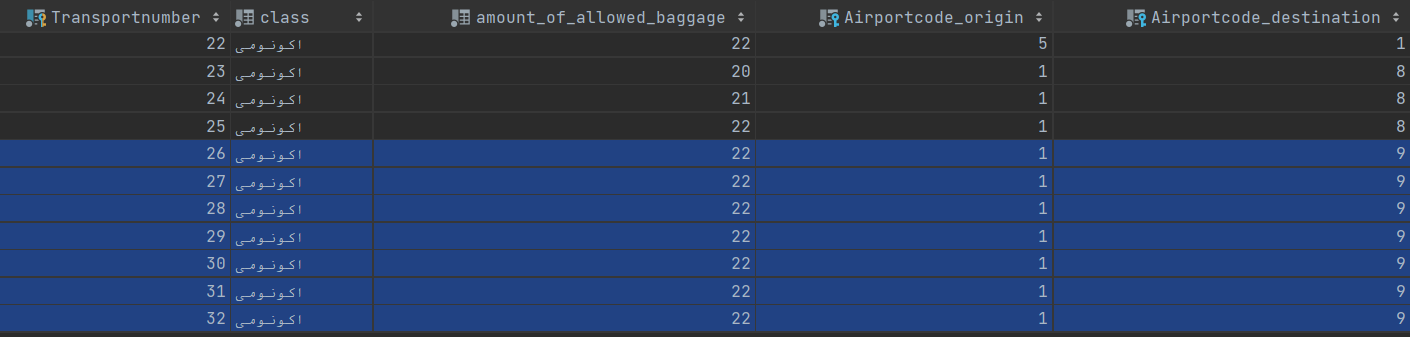
CREATE PROCEDURE *internationalFlight* @X int , @origin nvarchar(50), @destination nvarchar(50), @N int  
AS  
BEGIN  
DECLARE @Date DATE  
SET @Date = FORMAT(GETDATE(), 'yyyy/MM/dd', 'fa')  
select top (@X) \*  
from Transport, Flight, Overseas, Ticket  
where Transport.\_number = Flight.Transportnumber  
and Flight.Transportnumber = Ticket.Transportnumber  
and Overseas.FlightTransportnumber = Flight.Transportnumber  
and Transport.origin\_city\_id = (select City.id from City where City.name = @origin)  
and Transport.destination\_city\_id = (select City.id from City where City.name = @destination )  
and DATEDIFF(month, @Date, Transport.\_date) between -@N and 0  
order by Ticket.cost  
END

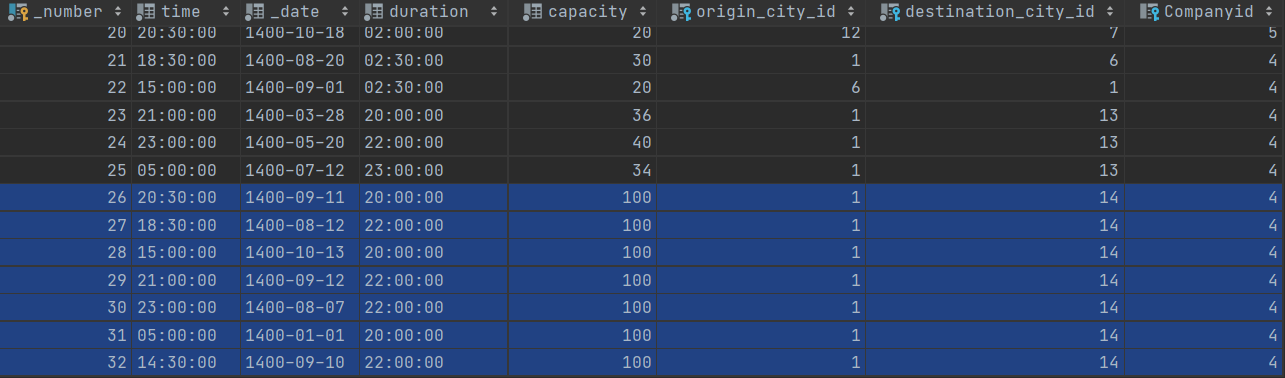
EXEC *internationalFlight* @X = 5, @origin = N'تهران', @destination = N'تورنتو', @N= 3;







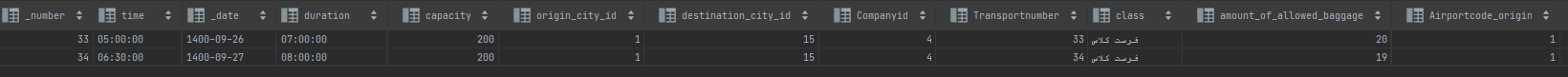


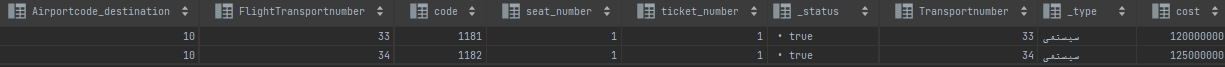


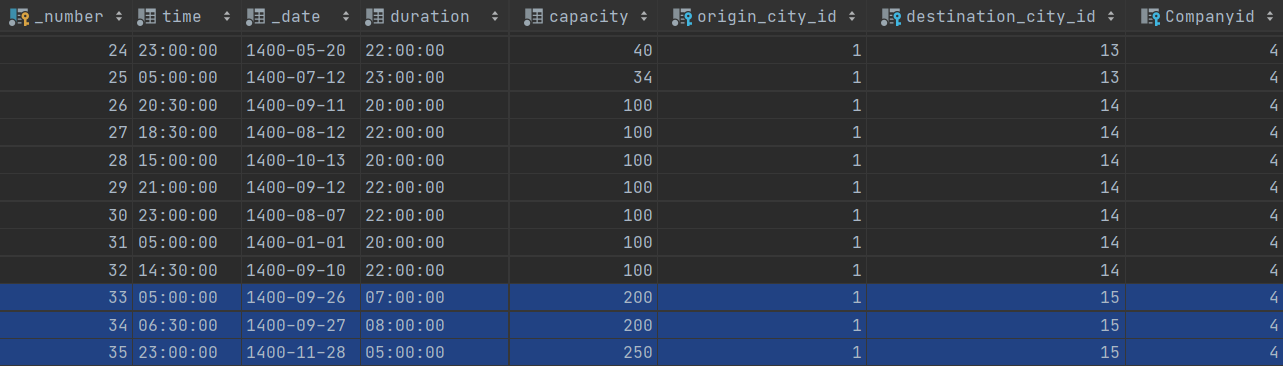
8

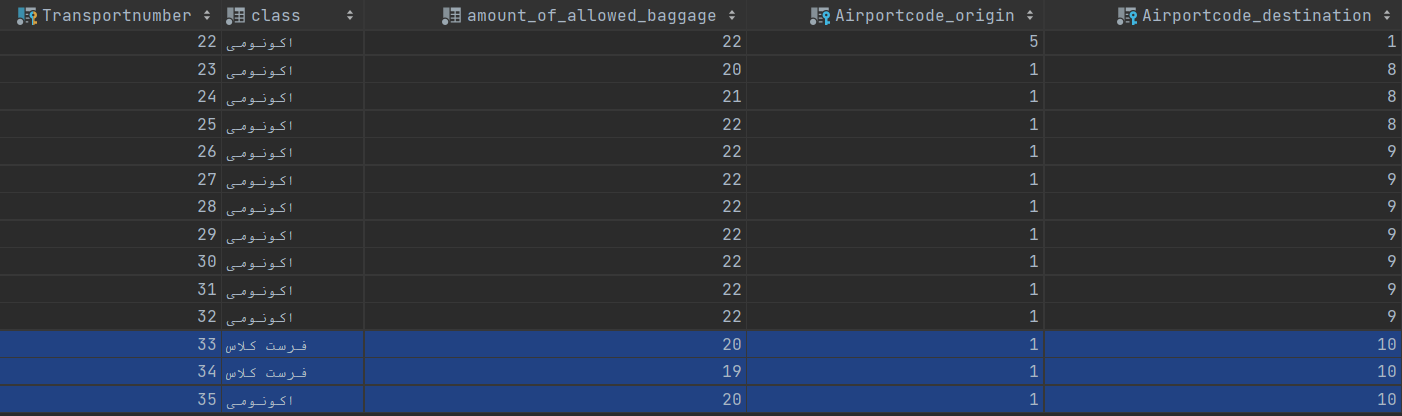
CREATE PROCEDURE *allInternationalTickets* @class nvarchar(50), @origin nvarchar(50), @destination nvarchar(50), @date1 date, @date2 date  
AS  
SELECT \*  
FROM transport, flight, overseas, ticket  
where transport.\_number = flight.transportnumber  
 and Flight.Transportnumber = Overseas.FlightTransportnumber  
 and Ticket.Transportnumber = Transport.\_number  
 and transport.origin\_city\_id = (select City.id from City where City.name = @origin)  
 and transport.destination\_city\_id = (select City.id from City where City.name = @destination)  
 and flight.class = @class  
 and transport.\_date between @date1 and @date2

EXEC *allInternationalTickets* @class = N'فرست کلاس', @origin = N'تهران', @destination = N'فرانکفورت', @date1 = '1400/09/25', @date2 = '1400/09/30';





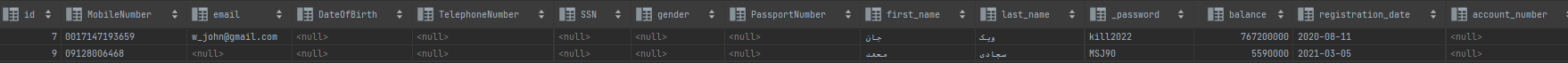


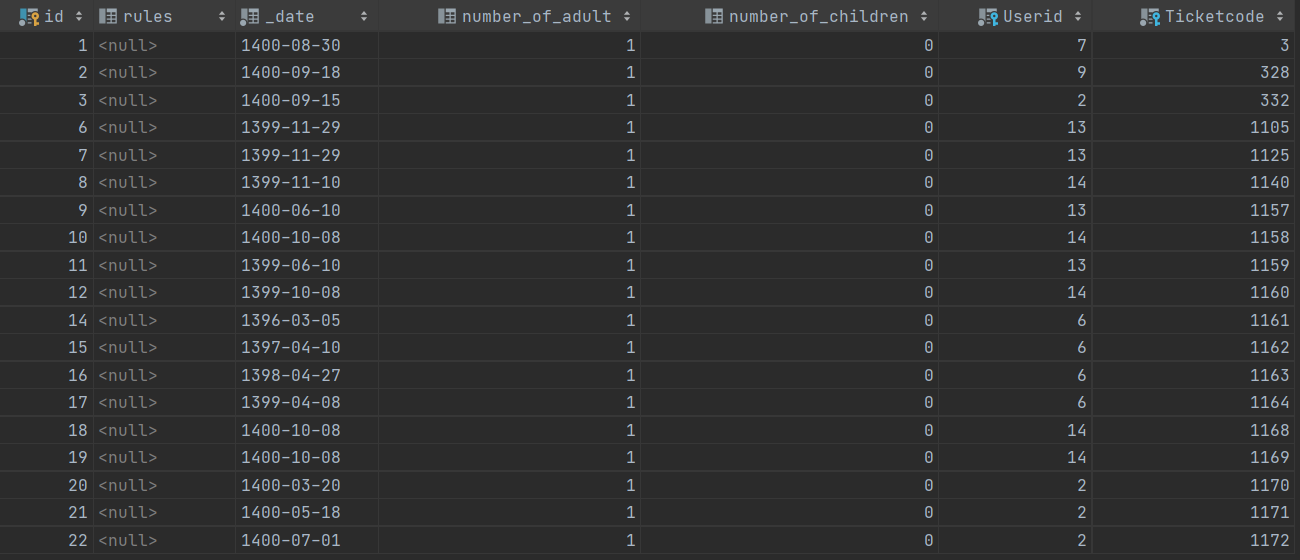


9

CREATE PROCEDURE *joinedUsers* @date1 date, @date2 date, @C int  
AS  
SELECT \_user.\*  
FROM \_user, transport\_reservation, transport, Ticket  
where \_user.id = transport\_reservation.userid  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and Transport.\_number = Ticket.Transportnumber  
 and ((registration\_date between @date2 and @date1)  
 or (select count(\*)  
 from Transport\_Reservation  
 where Transport\_Reservation.Userid = \_user.id  
 ) < @C)

EXEC *joinedUsers* @date1 = '1400/09/25', @date2 = '1400/10/13', @C = 2;

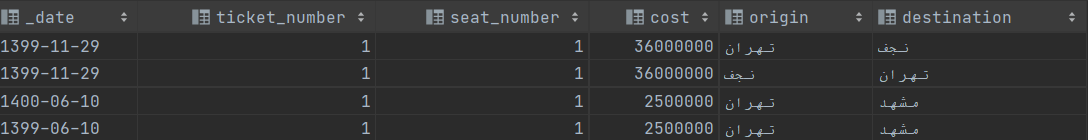




10

CREATE PROCEDURE *myTrips* @first\_name nvarchar(50), @last\_name nvarchar(50)  
AS  
SELECT transport\_reservation.\_date, Ticket.ticket\_number, Ticket.seat\_number, Ticket.cost, c1.name as origin, c2.name as destination  
FROM \_user, transport\_reservation, Ticket, Transport, City c1, City c2  
where \_user.id = transport\_reservation.userid  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and Ticket.Transportnumber = Transport.\_number  
 and \_user.first\_name = @first\_name  
 and \_user.last\_name = @last\_name  
 and Transport.origin\_city\_id = c1.id  
 and Transport.destination\_city\_id = c2.id

EXEC *myTrips* @first\_name = N'سجاد', @last\_name = N'محمدی';

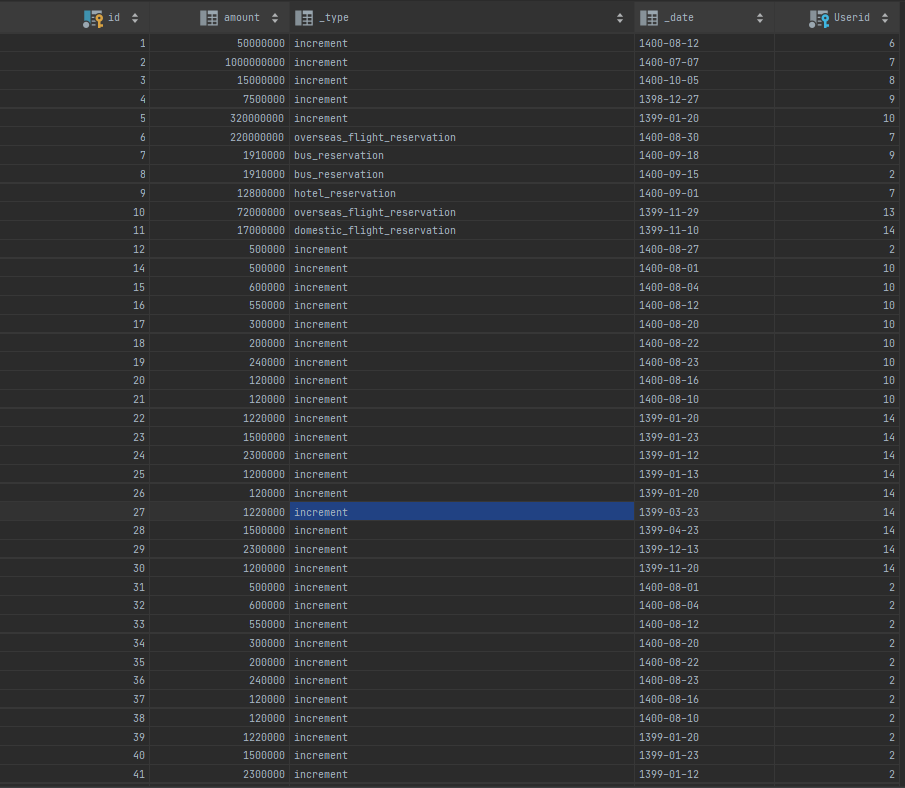


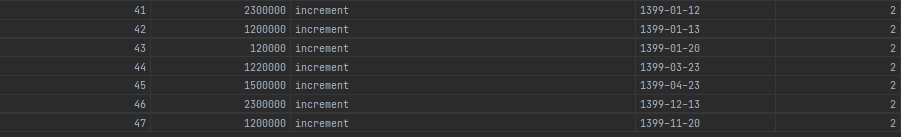
11

drop procedure *chargedUsers*CREATE PROCEDURE *chargedUsers* @X int, @Y int  
AS  
select count(\*) as number\_of\_user  
from \_user  
where  
\_user.id in (SELECT \_user.id  
 FROM \_user, transactions  
 where \_user.id = Transactions.Userid  
 and Transactions.\_type = 'increment'  
 group by \_user.id  
 having count(\*) >= @X)  
and \_user.id in (SELECT \_user.id  
 FROM \_user, transactions  
 where \_user.id = Transactions.Userid  
 and Transactions.\_type != 'increment'  
 group by \_user.id  
 having count(\*) <= @Y)

EXEC *chargedUsers* @X = 7, @Y = 15;



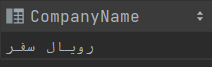


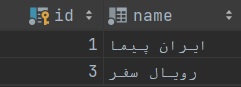


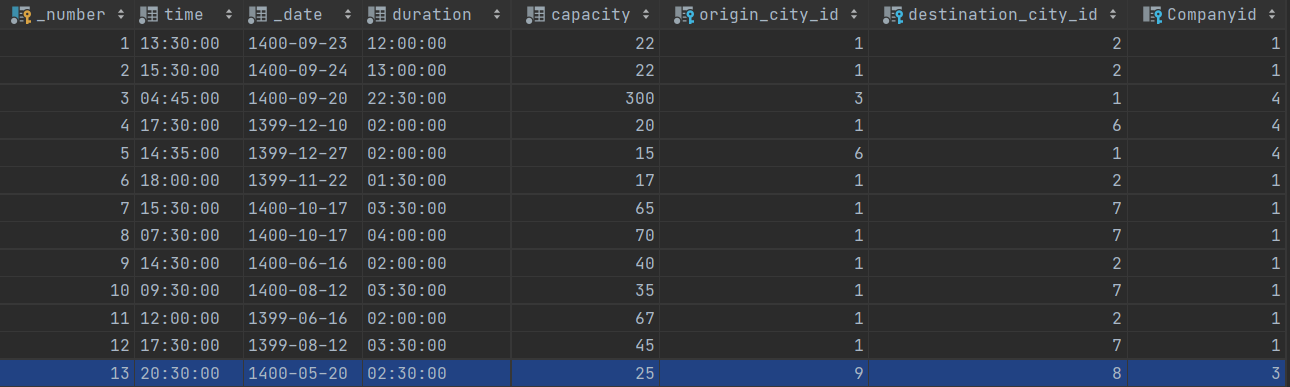
12

CREATE PROCEDURE *allBusTickets\_1* @origin nvarchar(50), @destination nvarchar(50)  
AS  
SELECT DISTINCT company.name as CompanyName  
FROM company, Transport, Bus  
where Transport.Companyid = Company.id  
and Transport.\_number = Bus.Transportnumber  
and Company.id not in (SELECT Company.id  
 FROM Company, Transport, Bus  
 where Transport.Companyid = Company.id  
 and Transport.\_number = Bus.Transportnumber  
 and Transport.origin\_city\_id = (select City.id from City WHERE City.name = @origin)  
 and Transport.destination\_city\_id = (select City.id from City WHERE City.name = @destination)  
 )

EXEC *allBusTickets\_1* @origin = N'کرج', @destination = N'قم';





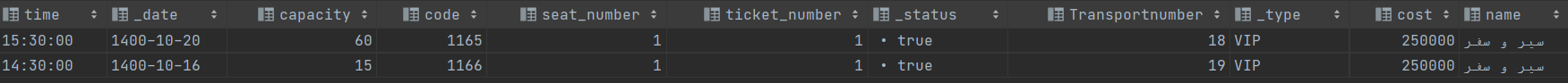


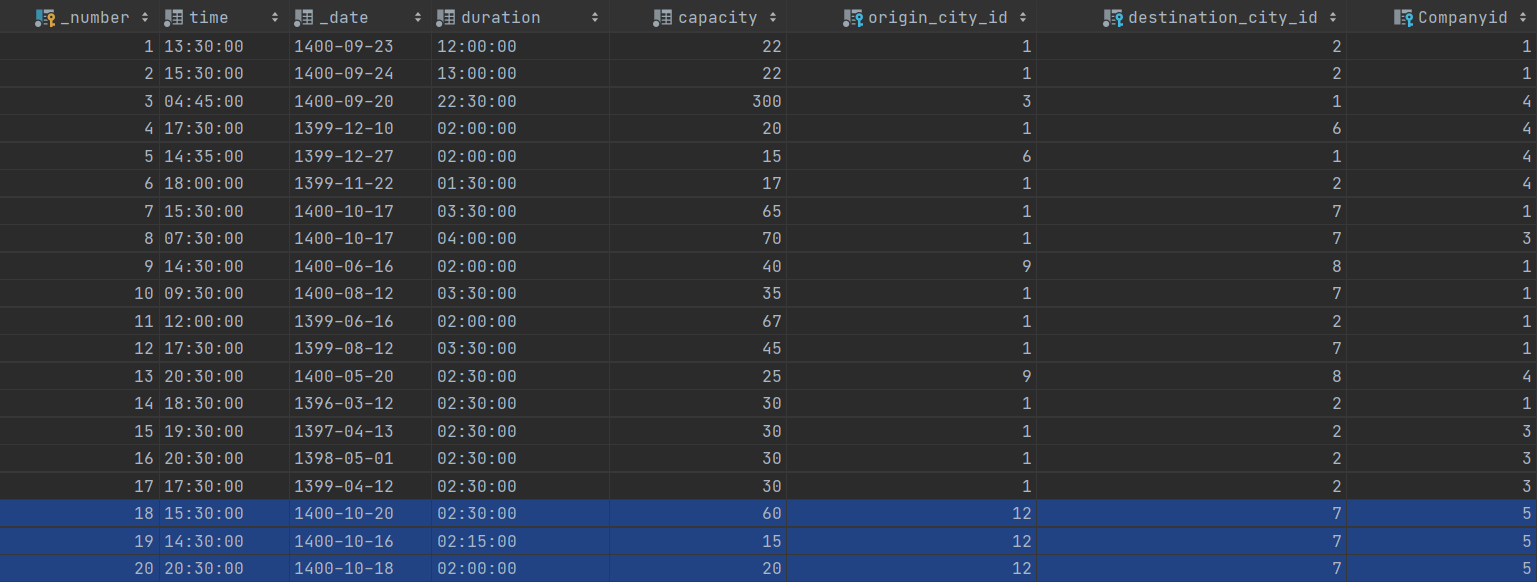


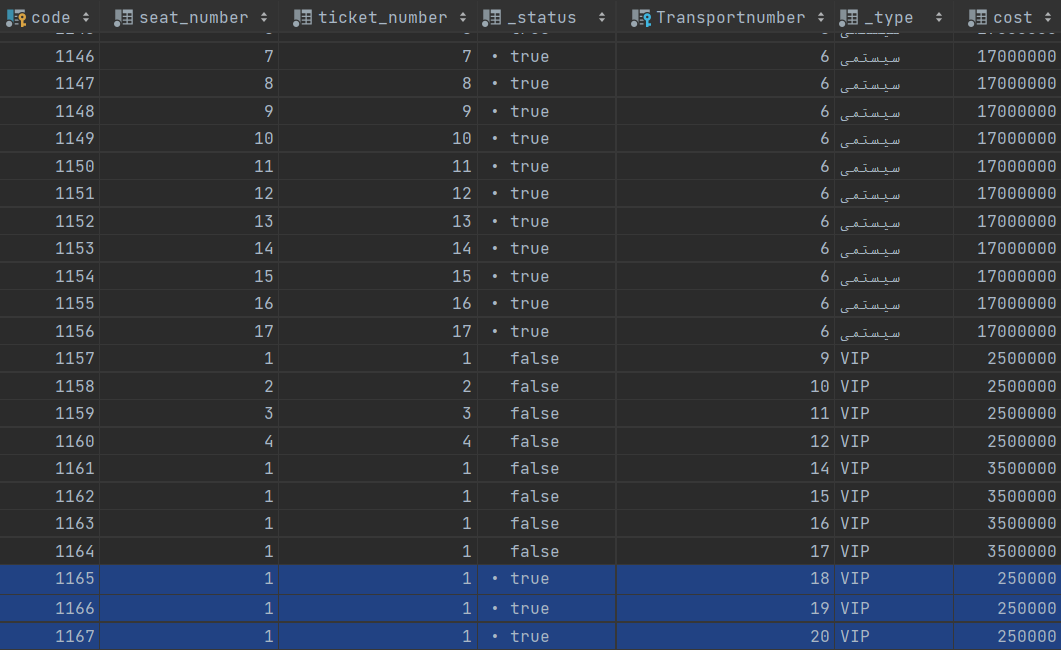
13

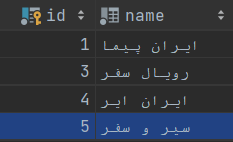
drop procedure *allBusTickets\_2*CREATE PROCEDURE *allBusTickets\_2* @origin nvarchar(50), @destination nvarchar(50), @company nvarchar(50), @cost int  
AS  
BEGIN  
 DECLARE @Date DATE  
 SET @Date = FORMAT(GETDATE(), 'yyyy/MM/dd', 'fa')  
 select Transport.time, Transport.\_date, Transport.capacity, Ticket.\*, Company.name  
 from Transport, Bus, Ticket, Company  
 where Bus.Transportnumber = Transport.\_number  
 and Transport.\_number = Ticket.Transportnumber  
 and Company.id = Transport.Companyid  
 and (Transport.\_date in  
 (select MIN(Transport.\_date)  
 from Transport, Bus, Ticket, Company  
 where Transport.\_number = Bus.Transportnumber  
 and Ticket.Transportnumber = Transport.\_number  
 and Company.id = Transport.Companyid  
 and Transport.\_date >= @Date  
 group by Transport.Companyid)  
 or Transport.capacity in  
 (select max(Transport.capacity)  
 from Transport, Bus, Ticket, Company  
 where Transport.\_number = Bus.Transportnumber  
 and Ticket.Transportnumber = Transport.\_number  
 and Company.id = Transport.Companyid  
 group by Transport.Companyid)  
 and Ticket.cost < @cost  
 and Company.name = @company  
 and Transport.origin\_city\_id = (select City.id from City where City.name = @origin)  
 and Transport.destination\_city\_id = (select City.id from City where City.name = @destination))  
END

EXEC *allBusTickets\_2* @origin = N'شیراز', @destination = N'اصفهان', @comPany = N'سیر و سفر', @cost = 300000;







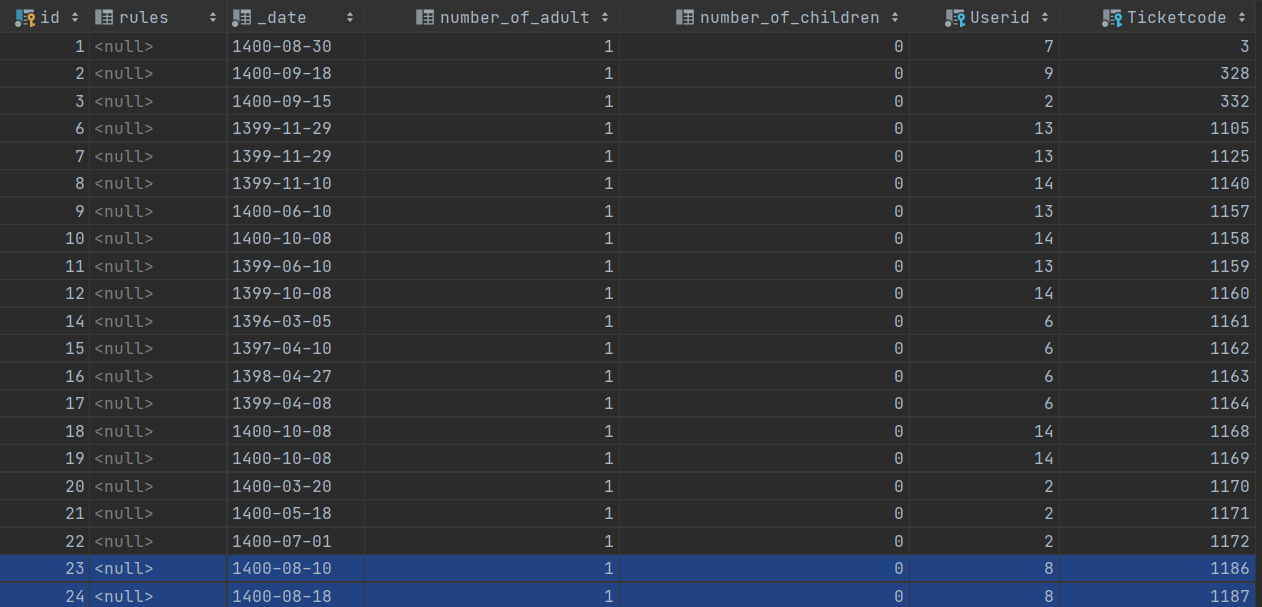


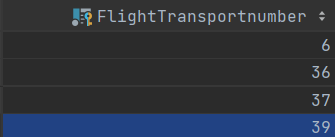
14

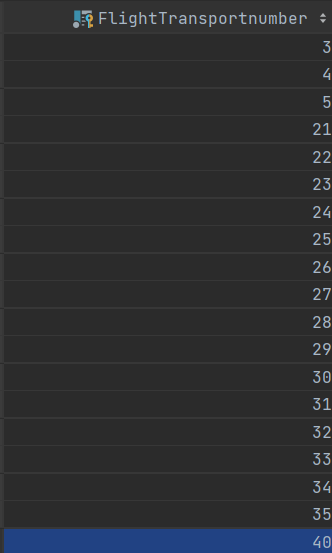
CREATE PROCEDURE *twoTrips* @origin nvarchar(50), @destination1 nvarchar(50), @destination2 nvarchar(50)  
AS  
SELECT DISTINCT \_user.first\_name, \_user.last\_name  
FROM \_user, transport\_reservation tr1, transport t1, transport\_reservation tr2, transport t2, Domestic, bus, Ticket tick1, Ticket tick2, Overseas, Flight f1, Flight f2  
where \_user.id = tr1.userid  
 and \_user.id = tr2.userid  
 and tr1.Ticketcode = tick1.code  
 and tr2.Ticketcode = tick2.code  
 and tick1.Transportnumber = t1.\_number  
 and tick2.Transportnumber = t2.\_number  
 and ((f1.Transportnumber = tick1.Transportnumber  
 and f1.Transportnumber = Domestic.FlightTransportnumber)  
 or (Bus.Transportnumber = tick1.Transportnumber))  
 and f2.Transportnumber = tick2.Transportnumber  
 and f2.Transportnumber = Overseas.FlightTransportnumber  
 and t1.\_date < t2.\_date  
 and t1.origin\_city\_id = (select City.id from City where City.name = @origin)  
 and t1.destination\_city\_id = (select City.id from City where City.name = @destination1)  
and t2.origin\_city\_id = (select City.id from City where City.name = @destination1)  
and t2.destination\_city\_id = (select City.id from City where City.name = @destination2)

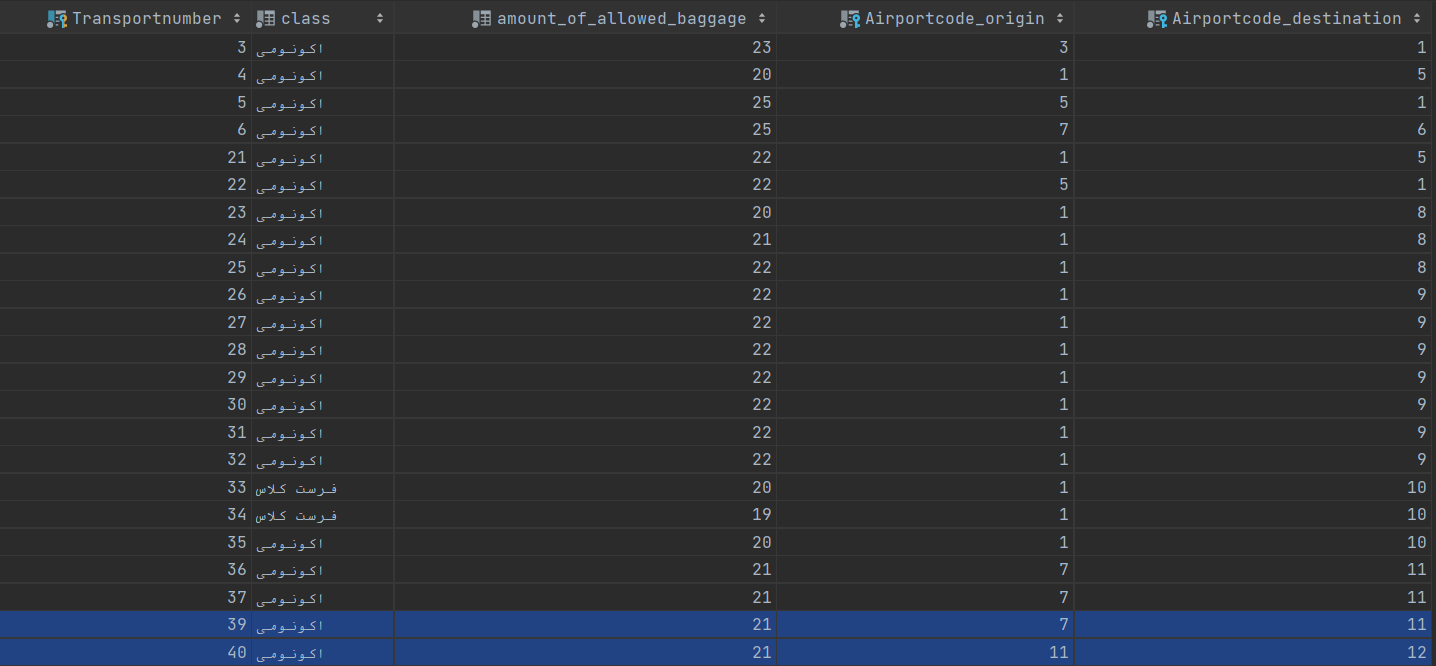
EXEC *twoTrips* @origin = N'تهران', @destination1 = N'کیش', @destination2 = N'دبی'









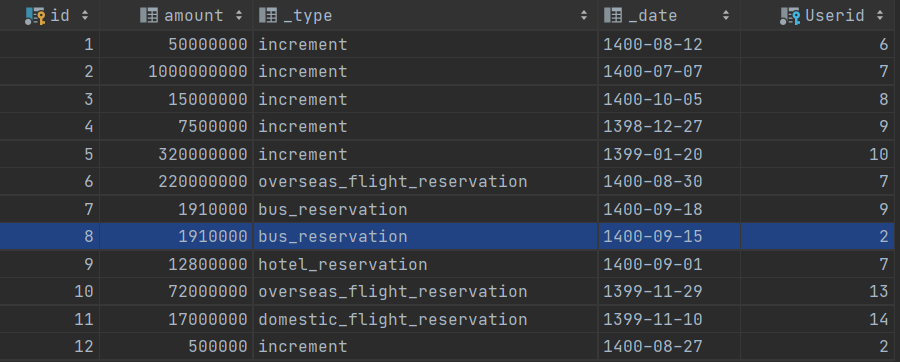


15

CREATE PROCEDURE *lastChange* @first\_name nvarchar(25), @last\_name nvarchar(25)  
AS  
SELECT \_type, \_date  
FROM Transactions  
WHERE \_date = (SELECT max(Transactions.\_date)  
 FROM \_user, transactions  
 where \_user.id = Transactions.userid  
 and \_user.first\_name = @first\_name  
 and \_user.last\_name = @last\_name)

EXEC *lastChange* @first\_name = N'زهره', @last\_name = N'رسولی';



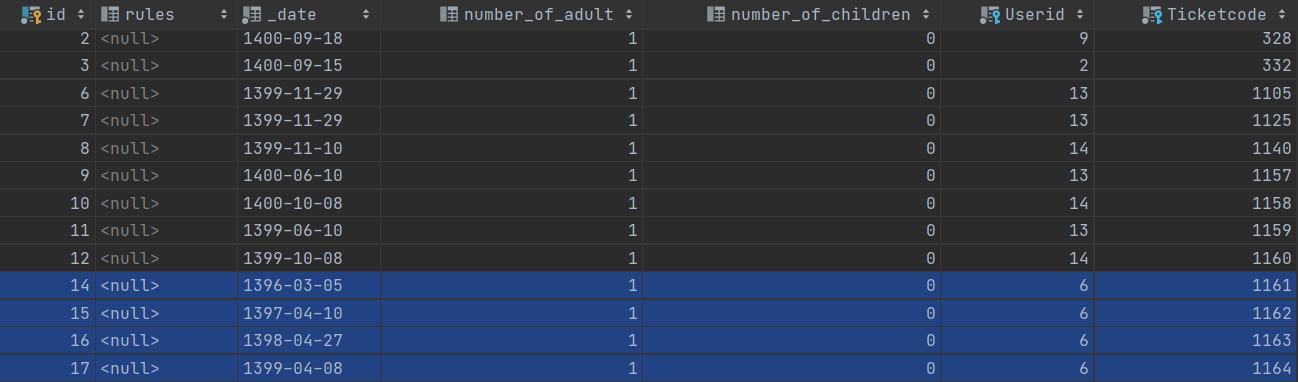


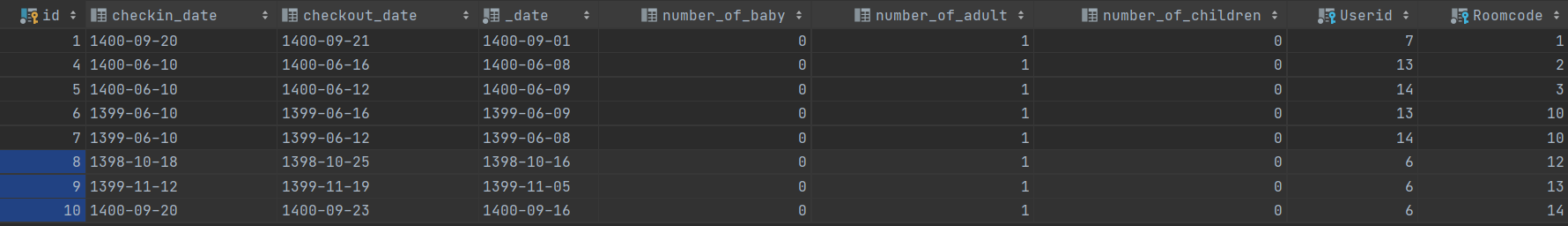
16

CREATE PROCEDURE *reserveHotel\_1* @N int, @city nvarchar(50), @date1 date, @date2 date, @M int, @origin nvarchar(50), @date3 date, @date4 date  
AS  
SELECT \*  
FROM \_user  
where \_user.id in (select \_user.id  
 from \_user ,hotel\_reservation, Room, Hotel  
 where \_user.id = hotel\_reservation.userid  
 and hotel\_reservation.Roomcode = Room.code  
 and Room.Hotelid = Hotel.id  
 and Hotel.Cityid = (select City.id from City where City.name = @city)  
 and hotel\_reservation.\_date between @date1 and @date2  
 group by \_user.id  
 having count(\*) = @N  
 )  
 and \_user.id in  
 (select \_user.id  
 from \_user, transport\_reservation, transport , Bus, Ticket  
 where \_user.id = transport\_reservation.userid  
 and transport\_reservation.Ticketcode = Ticket.code  
 and Ticket.Transportnumber = Transport.\_number  
 and Bus.Transportnumber = Transport.\_number  
 and Transport.origin\_city\_id = (select City.id from City where City.name = @origin)  
 and transport\_reservation.\_date between @date3 and @date4  
 group by \_user.id  
 having count(\*) = @M  
 )

EXEC *reserveHotel\_1* @N = 3, @city = N'کیش', @date1 = '1398/10/15', @date2 = '1400/10/15', @M = 4, @origin = N'تهران', @date3 = '1396/01/25', @date4 = '1399/05/11';





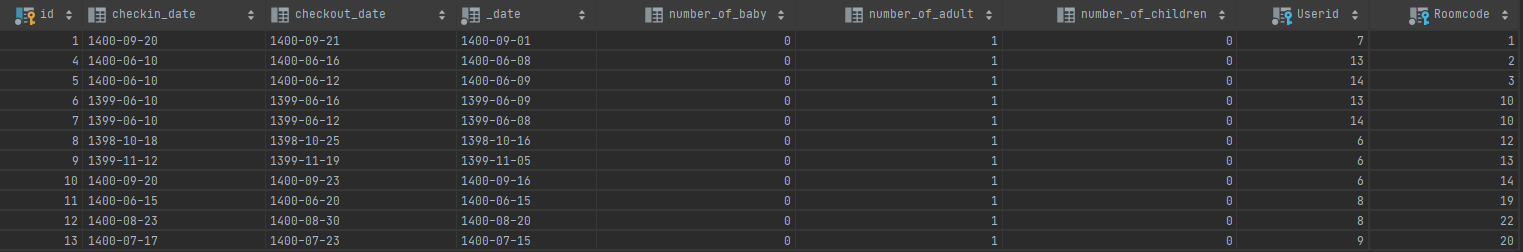


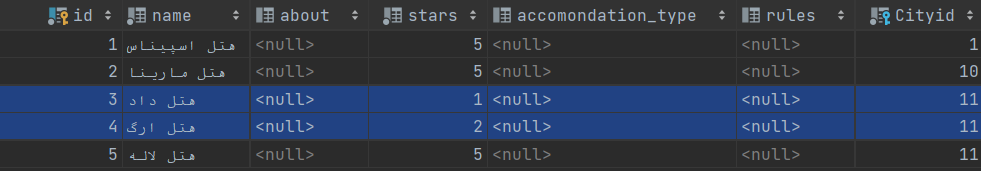
17

CREATE PROCEDURE *reserveHotel\_2* @date1 date, @date2 date, @city nvarchar(50)  
AS  
select \* from \_user where \_user.id in  
(select \_user.id  
from \_user, Hotel\_Reservation, Hotel, Room  
where \_user.id = Hotel\_Reservation.Userid  
and hotel\_reservation.Roomcode = Room.code  
and Room.Hotelid = Hotel.id  
and Hotel.Cityid = (select City.id from City where City.name = @city)  
and Hotel\_Reservation.\_date between @date1 and @date2  
and Hotel.stars < 3  
group by \_user.id  
having count(distinct Hotelid) = (select distinct count(\*)  
 from Hotel  
 where Hotel.Cityid = (select City.id from City where City.name = N'یزد')  
 and Hotel.stars < 3))

EXEC *reserveHotel\_2* @date1 = '1400/05/20', @date2 = '1400/09/20', @city = N'یزد';





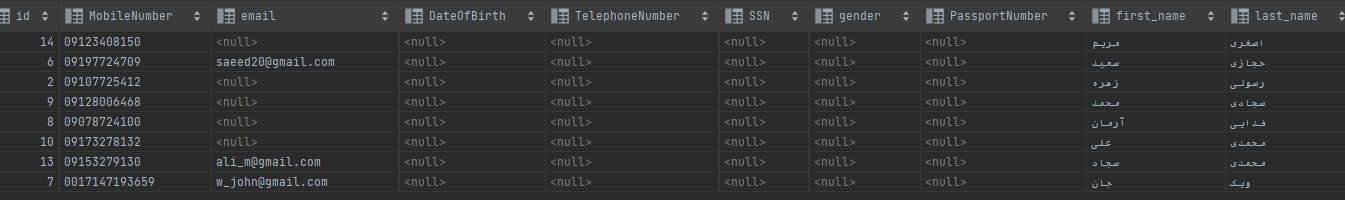


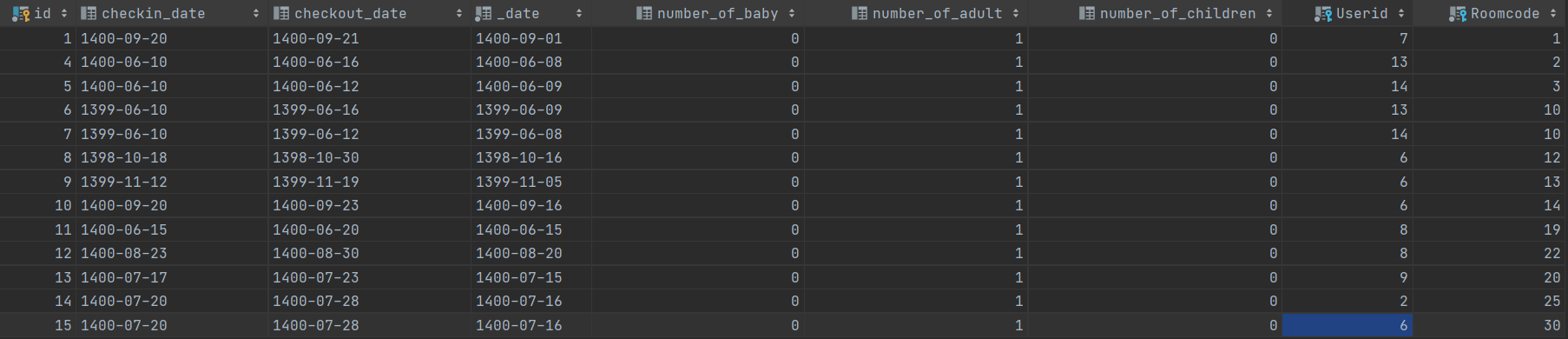
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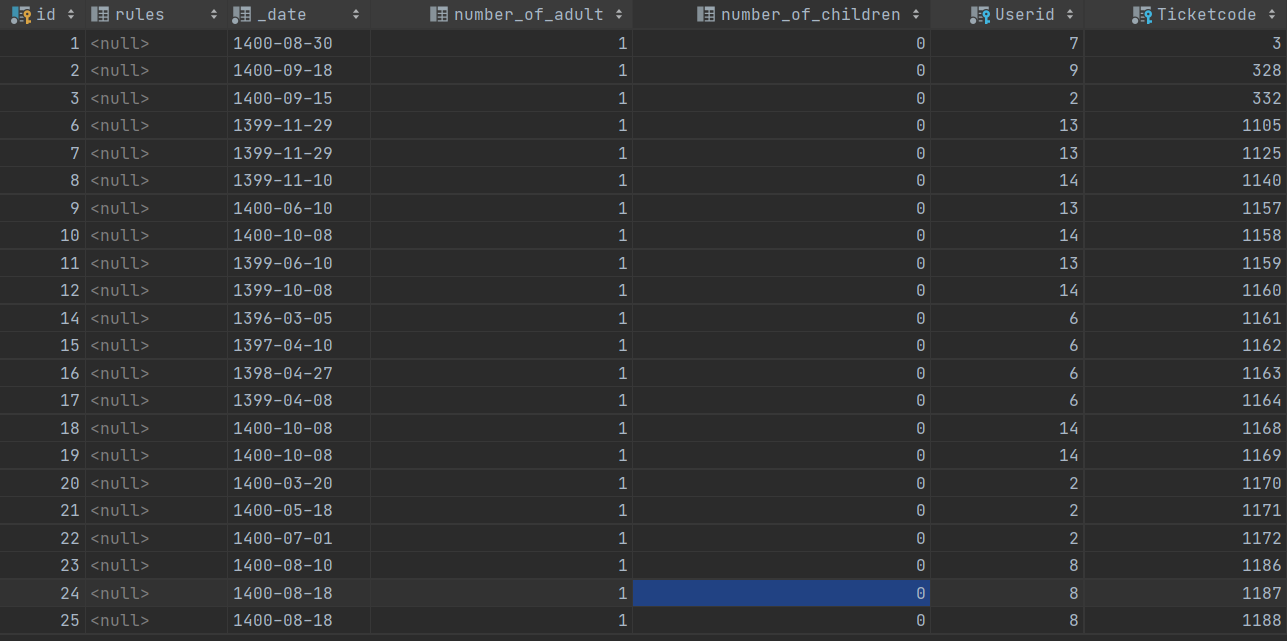
CREATE PROCEDURE *reserveHotel\_3* @city nvarchar(50), @destination nvarchar(50)  
AS  
select \_user.last\_name  
from \_user  
where \_user.id not in (select \_user.id  
from \_user, Transport, Transport\_Reservation, Ticket  
 where \_user.id = Transport\_Reservation.Userid  
 and Transport\_Reservation.Ticketcode = Ticket.code  
 and Ticket.Transportnumber = Transport.\_number  
 and Transport.origin\_city\_id = (select city.id from city where city.name = @destination))  
or \_user.id not in (select \_user.id  
 from \_user,Hotel\_Reservation, Hotel, Room  
 where \_user.id = Hotel\_Reservation.Userid  
 and Hotel\_Reservation.Roomcode = Room.code  
 and Room.Hotelid = Hotel.id  
 and Hotel.Cityid = (select city.id from city where city.name != @city))  
order by \_user.last\_name

EXEC *reserveHotel\_3* @city = N'مشهد', @destination = N'بندرعباس';







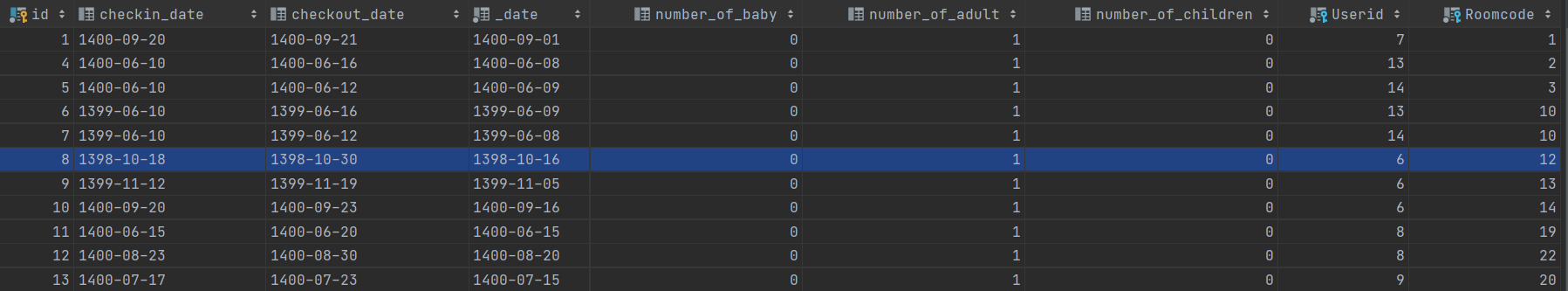


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CREATE PROCEDURE *reserveHotel\_4* @city nvarchar(50), @C int  
AS  
SELECT \*  
FROM \_user  
where \_user.id in (select Hotel\_Reservation.userid  
 from hotel\_reservation , hotel , Room  
 where Hotel\_Reservation.Roomcode = Room.code  
 and Room.Hotelid = Hotel.id  
 and DATEDIFF(day, Hotel\_Reservation.checkin\_date, Hotel\_Reservation.checkout\_date) > @C  
 and Hotel.Cityid = (select City.id from City where City.name = @city)  
)

EXEC *reserveHotel\_4* @city = N'کیش', @C = 7;





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CREATE PROCEDURE *reserveHotel\_5* @A int  
AS  
SELECT \*  
FROM Hotel  
WHERE Hotel.id in  
(SELECT Hotel.id  
FROM Hotel, Hotel\_Reservation, Room  
WHERE Hotel.id = Room.Hotelid  
 and Hotel\_Reservation.Roomcode = Room.code  
 group by Hotel.id  
 having count(\*) =  
(SELECT MAX (mycount)  
FROM (SELECT count(\*) mycount  
FROM hotel\_reservation,Room, Hotel  
where Hotel\_Reservation.Roomcode = Room.code  
and Room.Hotelid = Hotel.id  
and Hotel.stars > @A  
group by Hotelid) as mH))

EXEC *reserveHotel\_5* @A = 2;

