**Lab 5 - SQL – Joins: Inner, Outer; Sub queries: Correlated and Uncorrelated**

## 1.Update price of the ticket.

## a. Create a view compute\_price as below

## CREATE VIEW compute\_price AS

## SELECT Ticket.PNR, Ticket.Train\_No, Ticket.Departure, Ticket.Arrival,

## Route\_Info.Distance, Fare.fare\_per\_km

## FROM Ticket, Route\_Info, Fare

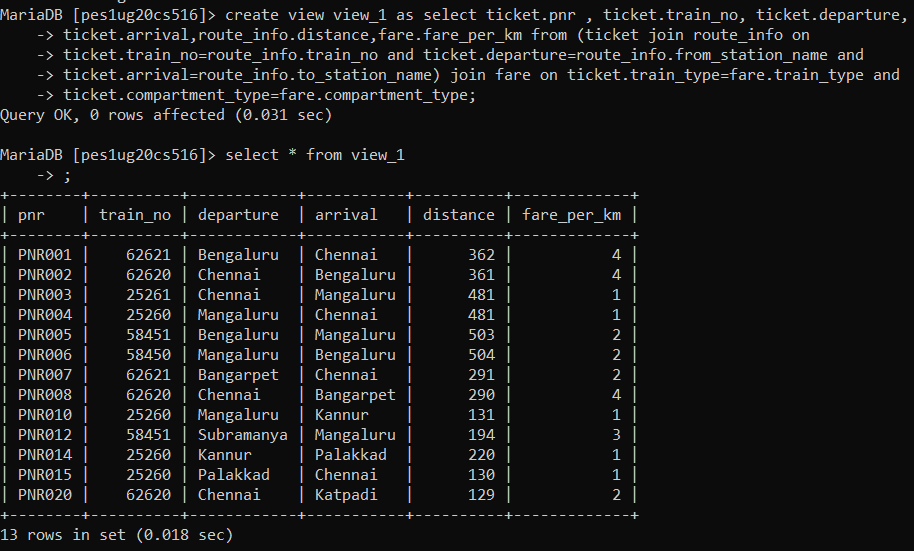
## WHERE (Ticket.Train\_No = Route\_Info.Train\_No AND

## Ticket.Departure = Route\_Info.From\_Station\_Name AND

## Ticket.Arrival = Route\_Info.To\_Station\_Name AND

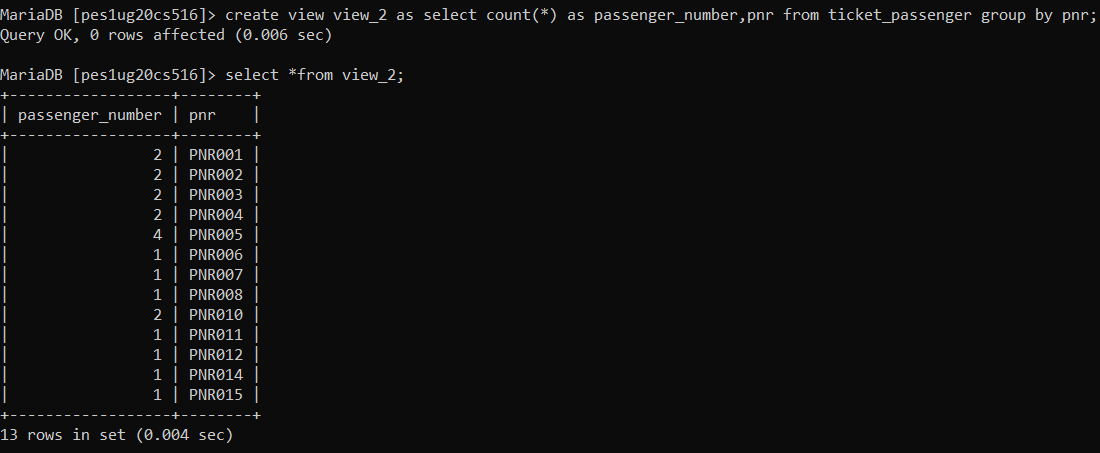
## Fare.Train\_Type=Ticket.Train\_Type AND

## Fare.Compartment\_Type =Ticket.Compartment\_type);



## b. Create a View passenger\_num

## CREATE VIEW passenger\_num AS select PNR, count(PNR) as numbers from Ticket\_Passenger group by PNR;

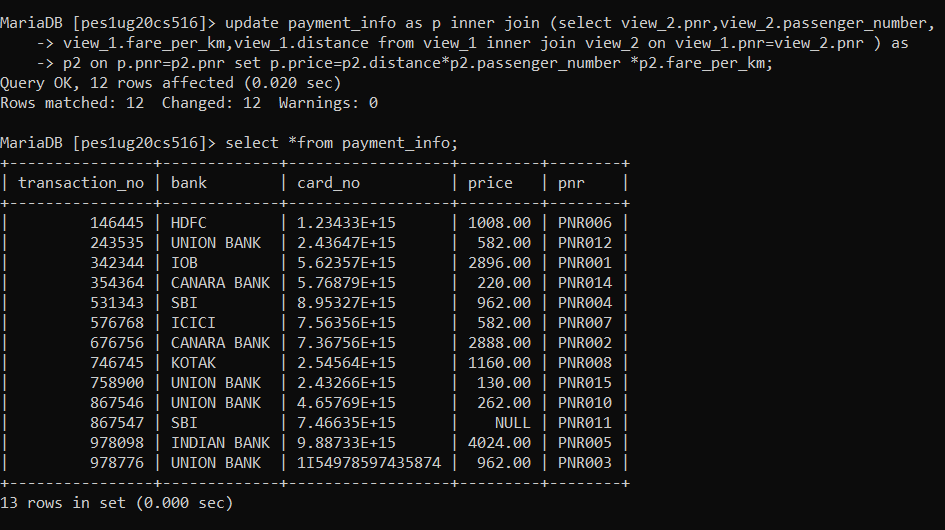


## c. Update Payment\_info.price as below

## UPDATE Payment\_Info AS p INNER JOIN compute\_price AS cs ON p.PNR =

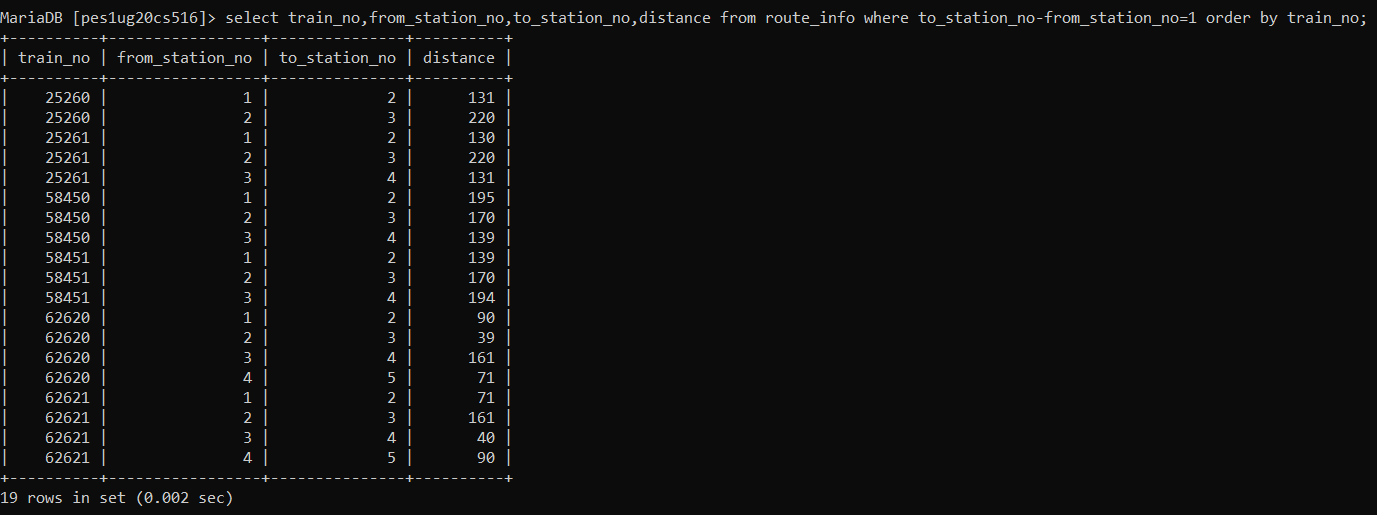
## cs.PNR INNER JOIN passenger\_num AS pn ON cs.PNR = pn.PNR SET p.Price =

## cs.Distance \* cs.Fare\_Per\_KM \* pn.numbers;



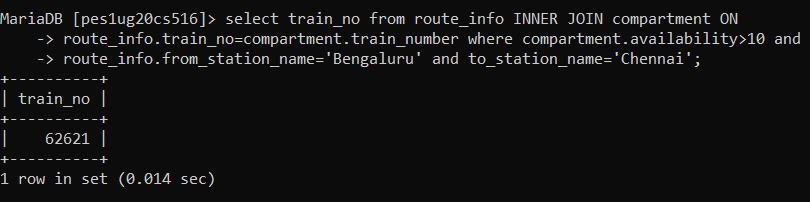
## NATURAL JOIN

## 2. Retrieve the all stations along route of the Trains along with the distance between the stations

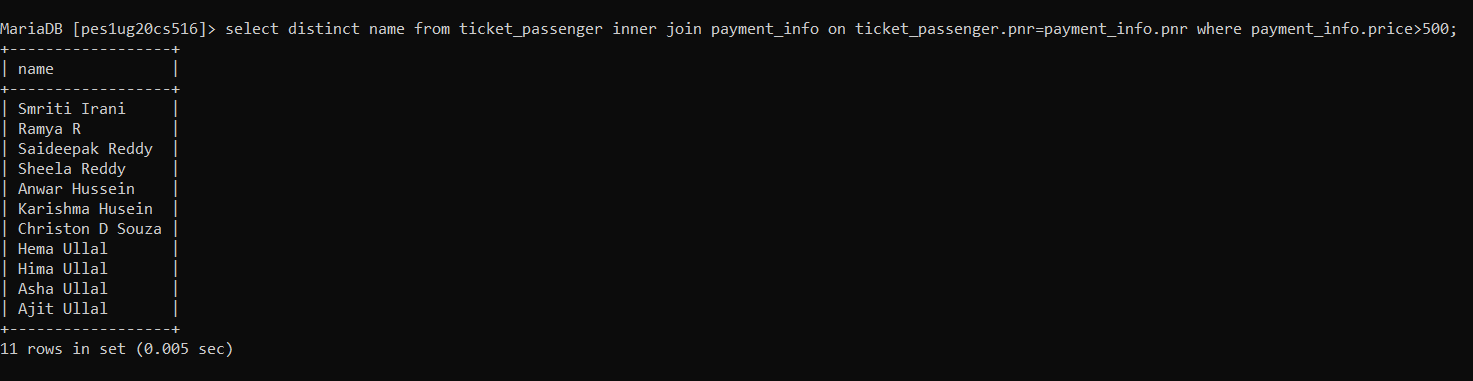


## INNER JOIN (equijoin)

## 3.Retrieve the Train no of train which is leaving Bengaluru and arriving at Chennai with compartments availability greater than 10.

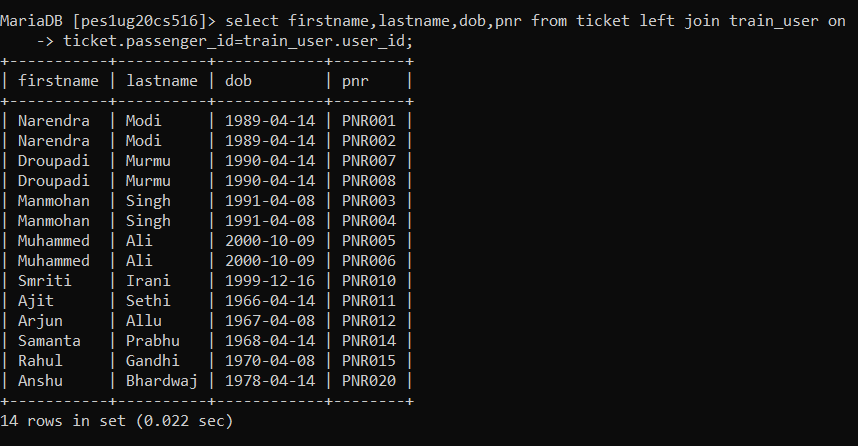


## 4.Retrieve first and last name of users who have booked a ticket with price greater than 500

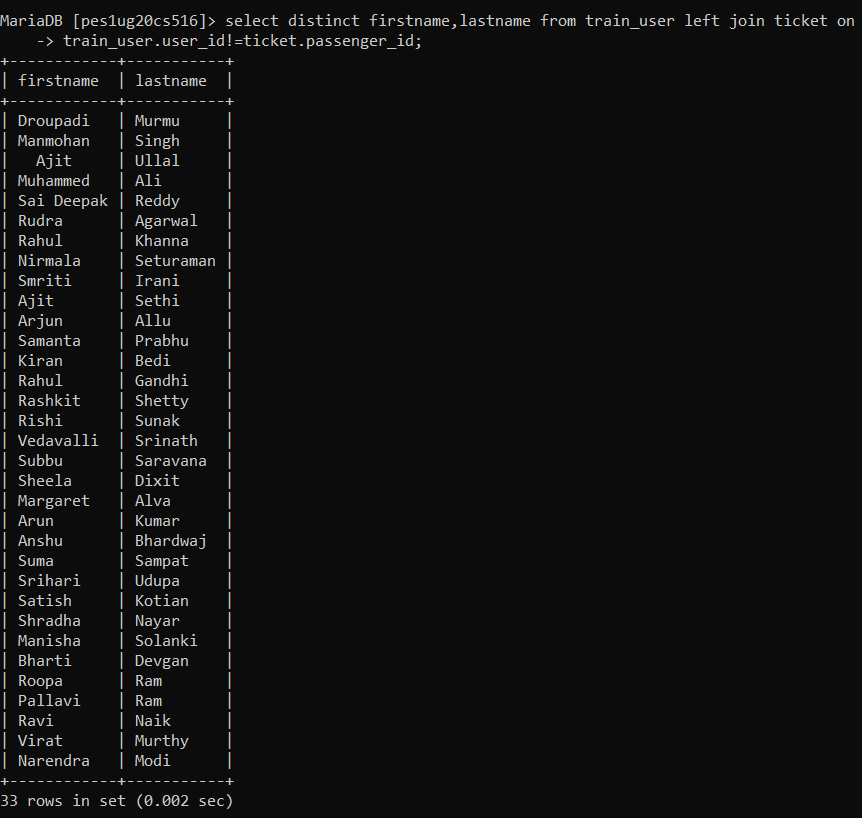


## LEFT OUTER JOIN

## 5. Retrieve the first name, last name, DOB and ticket PNR if they’ve bought it for all users.

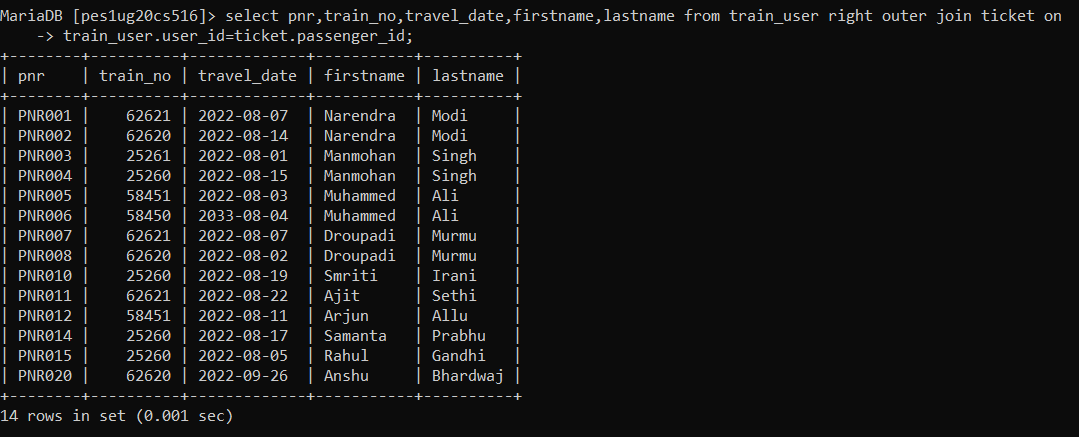


## 6. Retrieve the first name, last name, of the Users who have not bought a ticket.

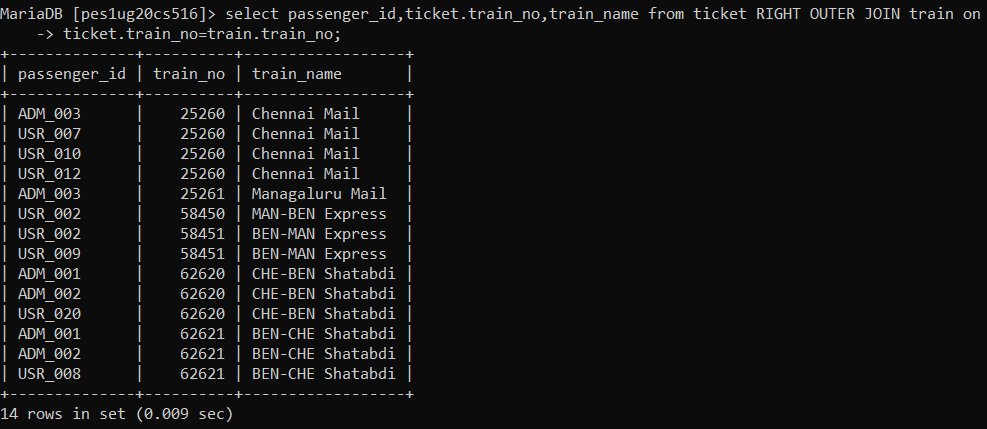


## RIGHT OUTER JOIN

## 7. Retrieve the ticket PNR, Train number, travel date and along with all users first name and last name.

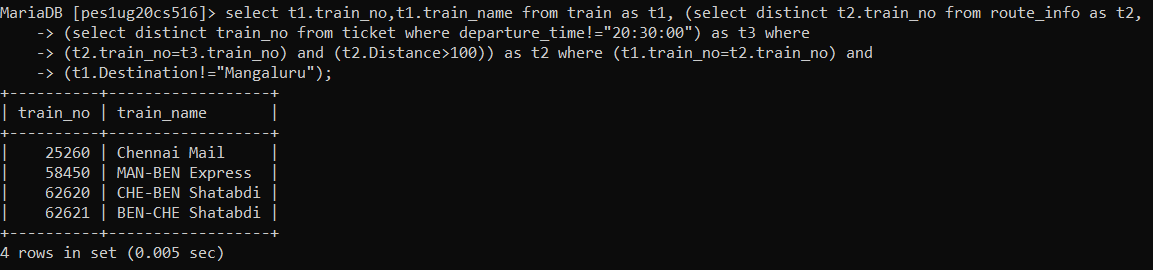


## 8. Retrieve the user id if they’ve travelled in a train along with train id and name of all trains.



## NESTED QUERIES

## 9. Retrieve the train no and name of trains whose destination is not Mangaluru and distance is not less than 100km and departure time is not 8:30:00 PM. (Correlated)



## 10. Retrieve the User ID who has spent more than the average ticket price. (Uncorrelated)

