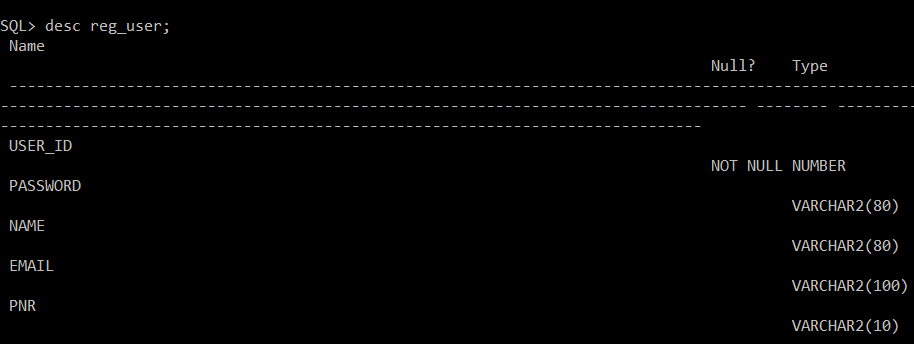
RAILWAY RESERVATION SYSTEM

* PL/SQL CODE SNIPPETS, TABLES AND OUTPUTS:

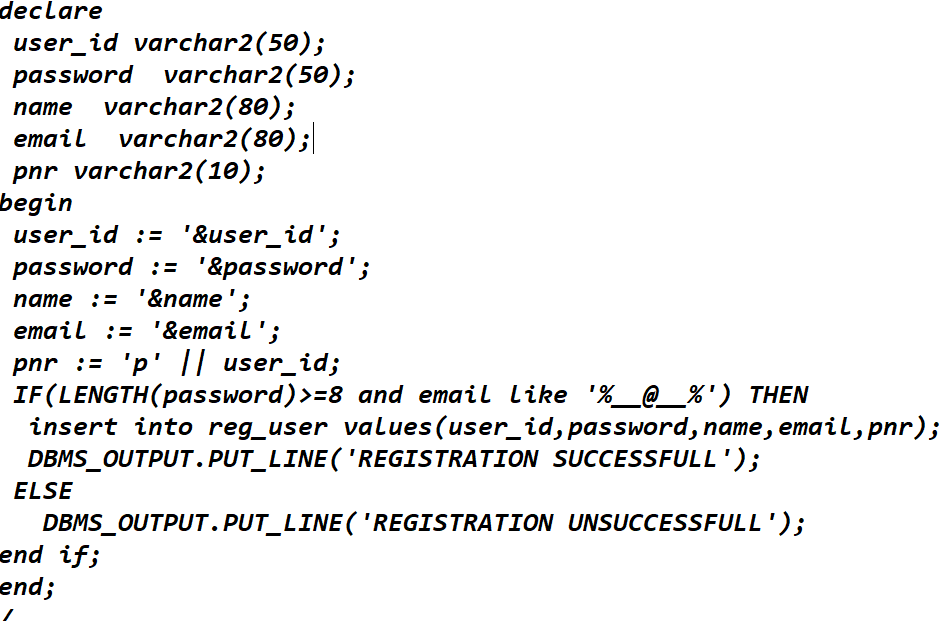
Login and Registration

reg\_user table

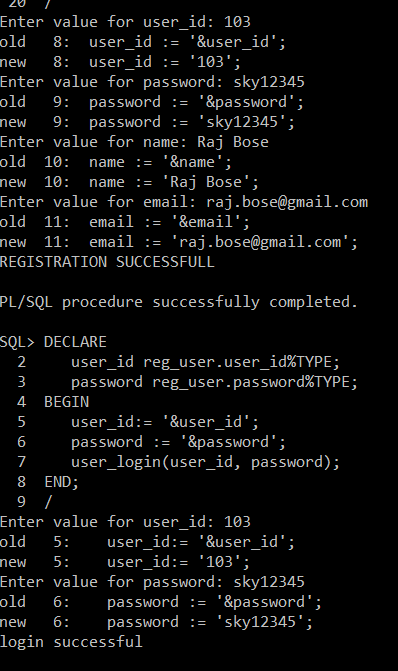




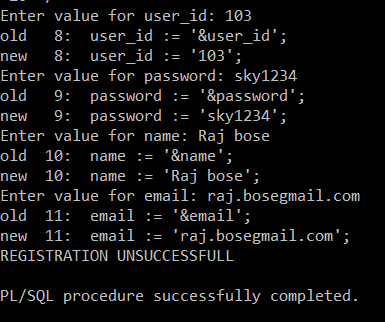
Registration PL/SQL



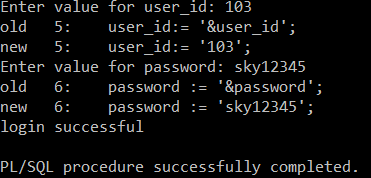
Registration and Login Checking output(successful output)



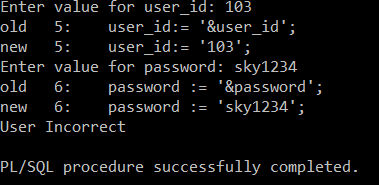
Registration output(unsuccessful output)



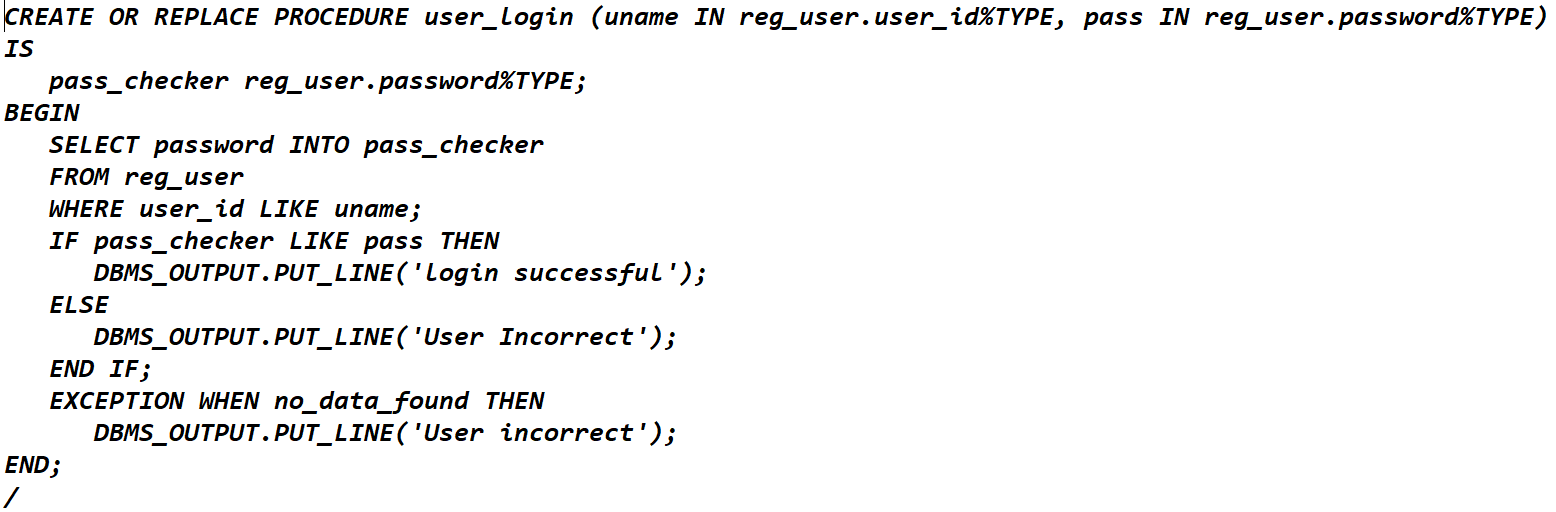
Login checking output(Successful)



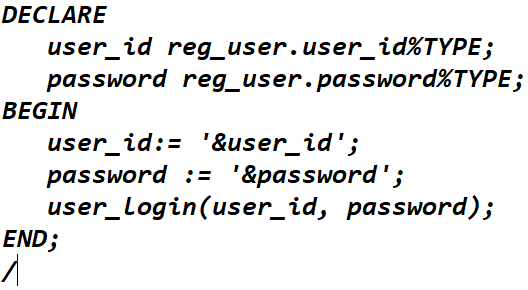
Login checking output(Error Login Output)



Login Checking PL/SQL(Already saved in Oracle DB)

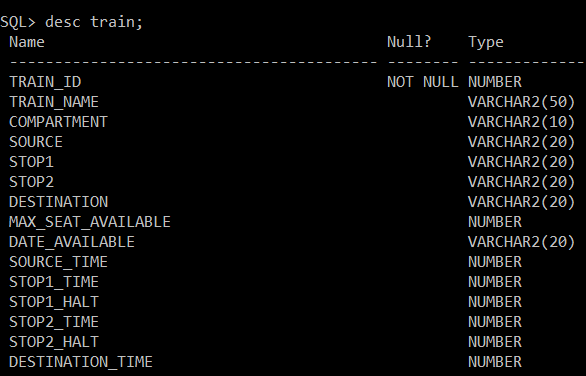


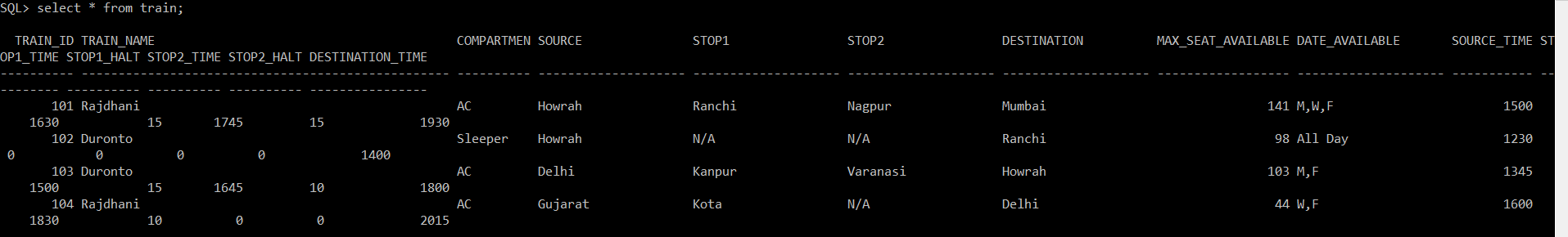
Calling the above procedure to login checking credentials



Train Viewing and Train Booking:

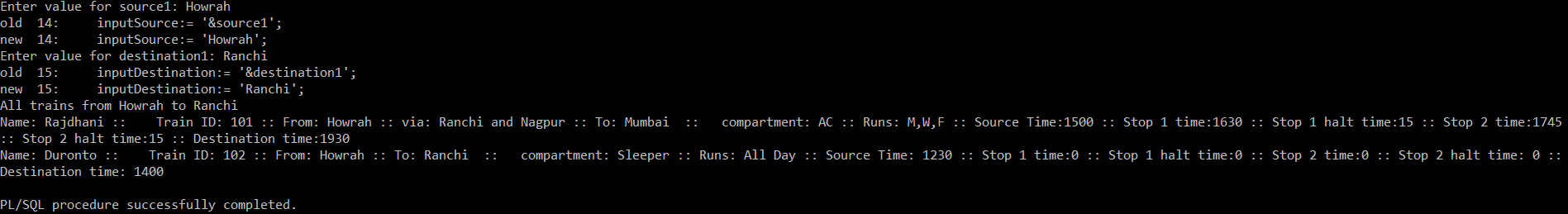
Train Table:



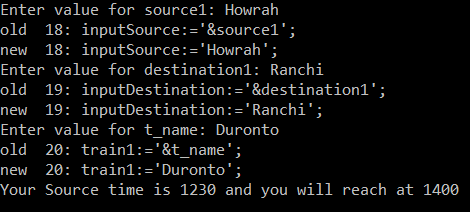


Train Viewing:

There are two trains from Howrah to ranchi, both Rajdhani and Duronto travels via same route.



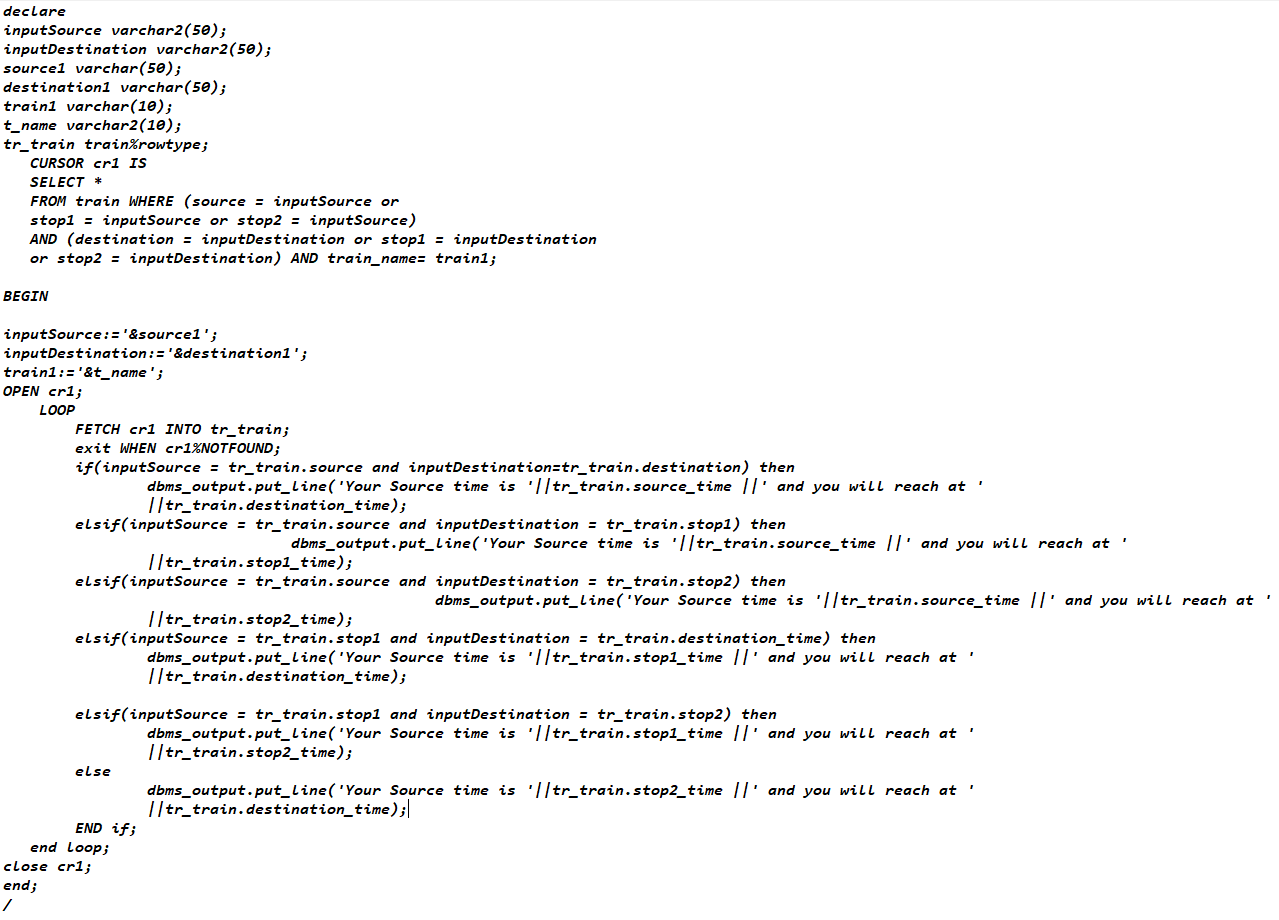
If user want to check specifically a train schedule.



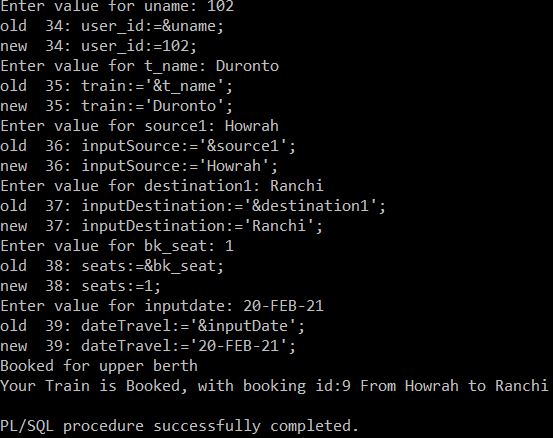
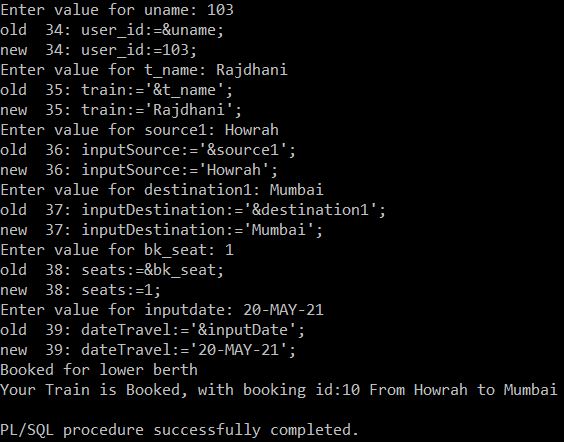
Train Viewing PL/SQL



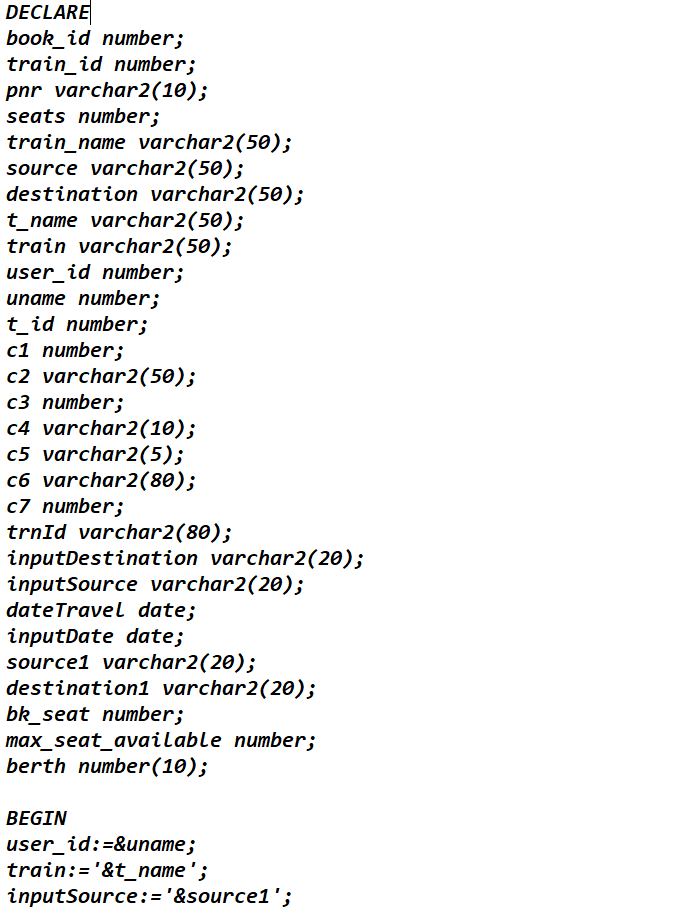
Train Schedule viewing PLSQL

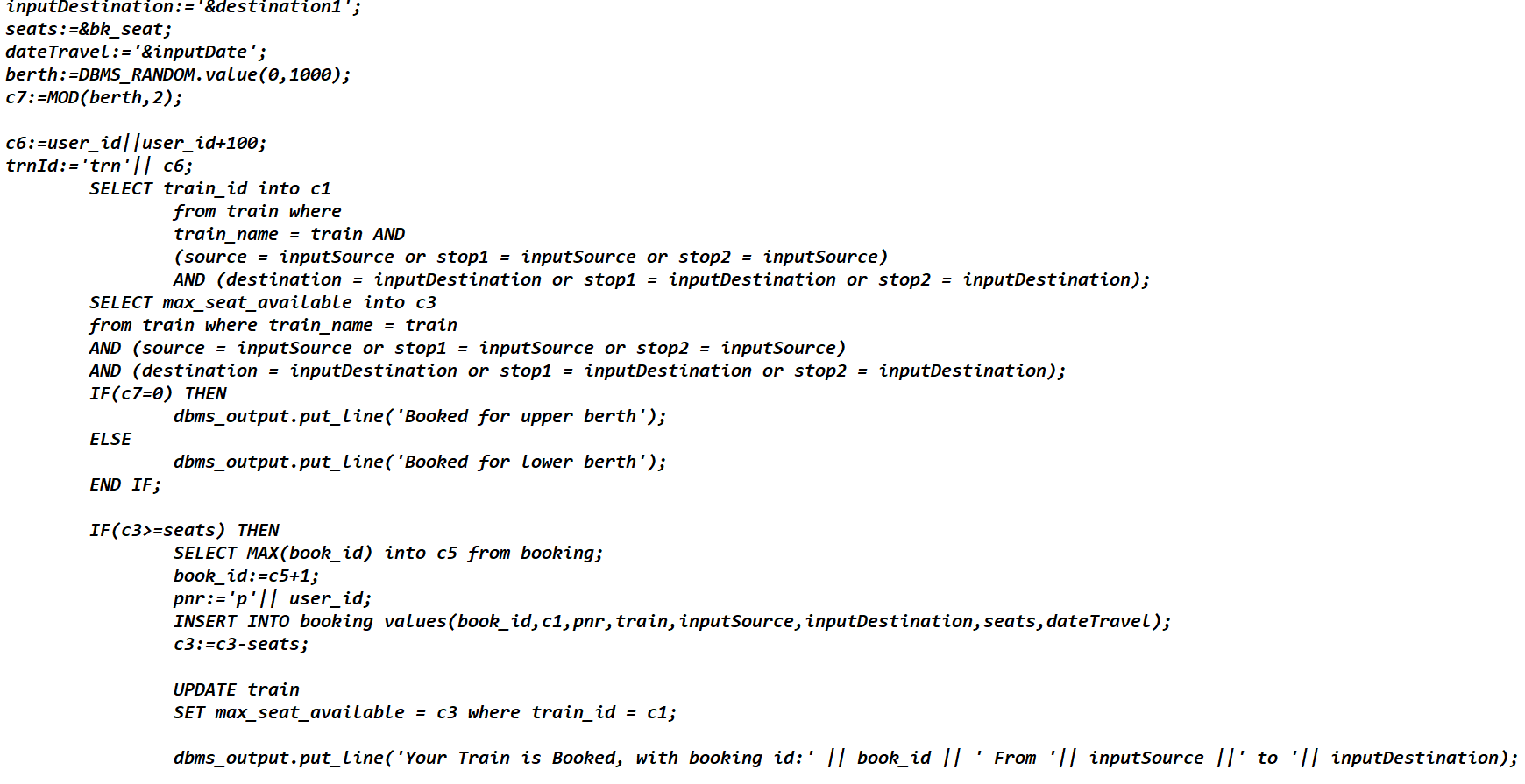


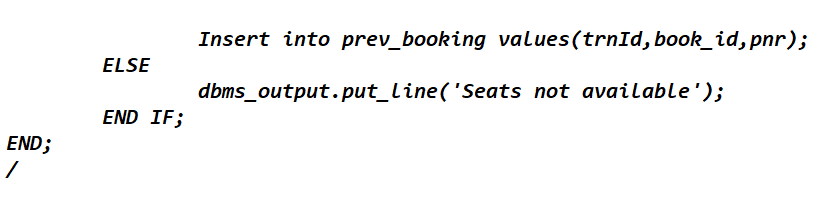
Train Booking Output(With automated berth generated)



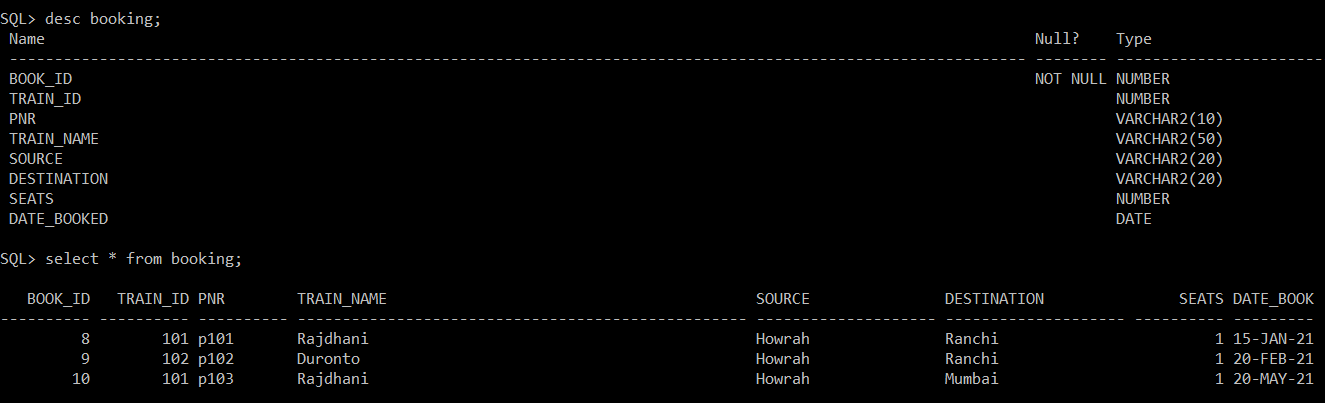
Train Booking PL/SQL



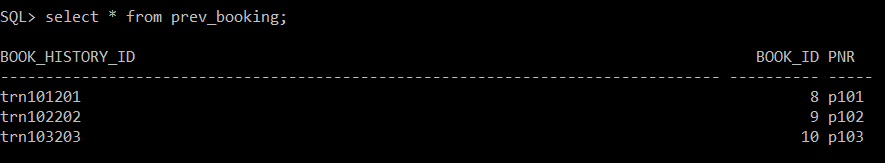




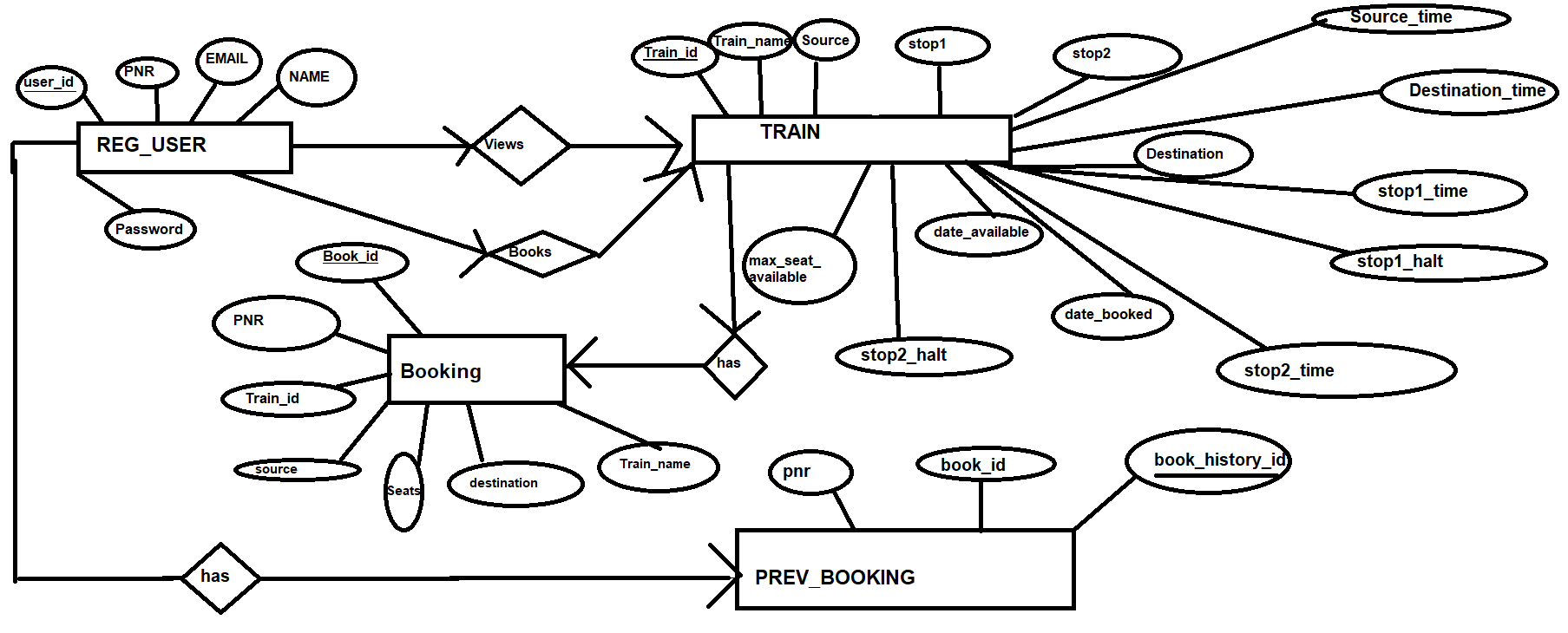
BOOKING TABLE



Prev\_Booking table:



* ERD



Cardinality and Process Flow Explanation from one attribute to another:

* REG\_USER consists of **user\_id** as primary key and also it consists of user’s detail like name, email, password and pnr is getting auto generated after registering.
* Then after registration is successful , the user needs to login with correct user\_id and password to proceed further.
* Assuming successful login , a user can now view the available trains details by inputting source and destination.
* Now after viewing, according to user’s flexiblity he/she can book a train by simply inputting source, destination , train\_name number of seats required and date of booking;
* After successful booking , the data of that booking with book\_id being auto generated is inserted into booking table and corresponding train table’s max\_seat\_available is getting updated at the same point of time and simultaneously in prev\_booking table where **book\_history\_id**(Primary Key in prev\_booking table) is getting auto generated and book\_id (Foreign key from booking table) getting auto inserted from booking table and pnr(foreign key from reg\_user table) is getting auto inserted into prev\_booking to maintain users booking history.
* Train table consists of **Train\_id** as primary key and it contains the some attributes like train\_name, source, destination, stop1 (as in stoppage 1) , stop2 (as in stoppage 2), destination and max\_seat\_available, source\_time(Train starting time from main source), stop1\_time(Train reaching time into stoppage 1), stop1\_halt(Halt time into stoppage 1 after reaching stoppage1), stop2\_time, stop2\_halt, destination\_time.
* The cardinality between REG\_USER and train is that one user can view many trains , i.e One-Many relation when viewing and one user can book one train at a time so one-one relation when booking.
* Booking table consists of **book\_id** as primary key and many attributes like pnr(foreign key from REG\_USER table), train\_id(foreign key from Train table),train\_name(foreign key from Train table) , source and destination being referred from train table as well and seats(i.e, number of booked seats by that user) and date\_booked( Booking date).
* The cardinality between Train and Booking is that one train has many booking, i.e one-many relation.
* The cardinality between REG\_USER and PREV\_BOOKING is one-many ,i.e a user can have history of booking.