**If a person enters the source and destination stations then he gets all available trains on the specific date.**

***create or replace view trainlist as***

***select trainid from***

***(select trainid,stopnumber as dno from route where stationid = 10)***

***as r1 natural join route where stopnumber < dno and stationid = 2***

***select trainid from trainlist natural join trainstatus where availabledate = '12/02/2017'***

**Date with maximum reservation**

*select availabledate, reservedstatus, count(reservedstatus) from reservation where reservedstatus='confirmed' group by availabledate, reservedstatus*

**Total waiting in particular class on a particular train**

*select trainid,class,count(reservedstatus) as waiting from reservation where reservedstatus='waiting' group by trainid,class*

**If more number of waiting seats on a train then suggest to add new seats (if waiting seats greater than confirmed seats for a train, then we need to add new seats)**

*select \* from*

*(*

*select trainid,count(reservedstatus) as waiting from reservation where reservedstatus='waiting' group by trainid*

*`` )as r1 natural join*

*(*

*select trainid,count(reservedstatus) as confirmed from reservation where reservedstatus='confirmed' group by trainid*

*)as r2;*

**Give the available dates in months for a particular train with departure times**

*select trainid, availabledate, stationname, depttime from trainlist natural join trainstatus natural join train natural join route*

*join station on sourceid=station.stationid*

**View reservations by a particular user i.e. reservation history**

*select \* from reservation where emailid='a@elit.ca'*

**PNR number gives train schedule**

***select trainid,pnr,stationid,arrtime,depttime,day from reservation natural join route where pnr=123 order by stopnumber asc***

**Train number gives the schedule**

*select trainid,stationname,arrtime,depttime,day from route natural join station where trainid=12009*

**Employee working on specific train or station**

*select \* from employee where trainid='18610'*

*Or*

*select \* from employee natural join station where stationname='ANAND*'

**PNR gives waiting list number**

***Select pnr, class, seatno, Reservedstatus from reservation where pnr = 123***

**PNR gives confirmed seat number**

***Select pnr, class, seatno, Reservedstatus from reservation where pnr = 123***

**If some person needs any assistance then he can get information of the on train TC for any help.**

*select empname, phoneno from reservation join employee on (reservation.trainid=employee.trainid) where pnr = 123 and category = 'TC'*

**Generate confirmed list and waiting list for a particular train on a givendate**

*select \* from (*

*select pnr,class,seatno,pname,reservedstatus,stationname as sourcename from (*

*select pnr,class,seatno,pname,reservedstatus,sourceid, destid from*

*reservation natural join passenger*

*where reservedstatus='waiting' or reservedstatus='confirmed' and availabledate='2017-12-01'and trainid=12009*

*) as r1 join station on (r1.sourceid = station.stationid) order by reservedstatus asc*

*) as r3 natural join*

*(*

*select pnr,class,seatno,pname,reservedstatus,stationname as destname from (*

*select pnr,class,seatno,pname,reservedstatus,sourceid, destid from*

*reservation natural join passenger*

*where reservedstatus='waiting' or reservedstatus='confirmed' and availabledate='2017-12-01'and trainid=12009*

*) as r2 join station on (r2.destid = station.stationid) order by reservedstatus asc*

*) as r4*

**Total passengers travelled on a particular train on a given date**

*select \* from (*

*select trainid,availabledate,sum(b1+b2+b3) as total\_passenger from(*

*select trainid,availabledate,sum(bookedseats1) as b1,sum(bookedseats2) as b2 , sum(bookedseats3) as b3 from trainstatus natural join train group by (trainid,availabledate)*

*)as r1 group by (availabledate,trainid)*

*)as r2 where trainid='12010' and availabledate='12/4/17'*