SCHEMA DETAILS

Name	Type	Schema
Airline		CREATE TABLE `Airline` (`AirlineCode` varchar(10) NOT NULL, `Name` char(20) NOT NULL, `Number Of Flights` INTEGER, `Headquater` varchar(20), PRIMARY KEY(`AirlineCode`))
AirlineCode	varchar(10)	"AirlineCode" varchar(10) NOT NULL
Name	char(20)	"Name" char(20) NOT NULL
Number Of Flights	INTEGER	"Number Of Flights" INTEGER
Headquater	varchar(20)	"Headquater" varchar(20)
Booking		CREATE TABLE `Booking` (`BookingID` varchar(10) NOT NULL, `BookingTime` time NOT NULL, `BookingDate` date NOT NULL, `TransactionID` varchar(10) NOT NULL, `FlightNumber` INTEGER NOT NULL, `PassengerID` varchar(10), PRIMARY KEY(`BookingID`))
BookingID	varchar(10)	"BookingID" varchar(10) NOT NULL
BookingTime	time	"BookingTime" time NOT NULL
BookingDate	date	"BookingDate" date NOT NULL
TransactionID	varchar(10)	"TransactionID" varchar(10) NOT NULL
FlightNumber	INTEGER	"FlightNumber" INTEGER NOT NULL
PassengerID	varchar(10)	"PassengerID" varchar(10)
Flight		CREATE TABLE `Flight` (`FlightNumber` INTEGER NOT NULL, `AirlineCode` varchar(10) NOT NULL, `Origin` NUMERIC NOT NULL, `Destination` NUMERIC NOT NULL, `Price` INTEGER NOT NULL, `Departure Time` time NOT NULL, `Arrival Time` time NOT NULL, `Days` varchar(7) NOT NULL, `Seats Available` INTEGER NOT NULL, PRIMARY KEY(`FlightNumber`))
FlightNumber	INTEGER	"FlightNumber" INTEGER NOT NULL
AirlineCode	varchar(10)	"AirlineCode" varchar(10) NOT NULL
Origin	NUMERIC	"Origin" NUMERIC NOT NULL
Destination	NUMERIC	"Destination" NUMERIC NOT NULL
Price	INTEGER	"Price" INTEGER NOT NULL
Departure Time	time	"Departure Time" time NOT NULL

Name	Type	Schema
Arrival Time	time	"Arrival Time" time NOT NULL
Days	varchar(7)	"Days" varchar(7) NOT NULL
Seats Available	INTEGER	"Seats Available" INTEGER NOT NULL
Passenger		CREATE TABLE Passenger (`Passenger ID` varchar(10) primary key not null, `First Name` char(10) not null, `Last Name` char(10), `Age` integer not null, `Sex` char(1) not null, `Origin` char(20), `Destination` char(20), `Phone Number` integer check(`Phone Number` <= 9999999999 and `Phone Number` >= 0), `Date of Travel` date, `Budget` integer)
Passenger ID	varchar(10)	"Passenger ID" varchar(10) NOT NULL
First Name	char(10)	"First Name" char(10) NOT NULL
Last Name	char(10)	"Last Name" char(10)
Age	integer	"Age" integer NOT NULL
Sex	char(1)	"Sex" char(1) NOT NULL
Origin	char(20)	"Origin" char(20)
Destination	char(20)	"Destination" char(20)
Phone Number	integer	"Phone Number" integer CHECK(`Phone Number`<=9999999999 and `Phone Number`>=0)
Date of Travel	date	"Date of Travel" date
Budget	integer	"Budget" integer
Transaction		CREATE TABLE `Transaction` (`TransactionID` varchar(10) NOT NULL, `BookingID` varchar(10) NOT NULL, `PassengerID` varchar(10) NOT NULL, `Amount` INTEGER NOT NULL, PRIMARY KEY(`TransactionID`))
TransactionID	varchar(10)	"TransactionID" varchar(10) NOT NULL
BookingID	varchar(10)	"BookingID" varchar(10) NOT NULL
PassengerID	varchar(10)	"PassengerID" varchar(10) NOT NULL
Name	**Type**	**Schema**
Amount	INTEGER	"Amount" INTEGER NOT NULL

Creating Tables

CREATE TABLE `Airline` (`AirlineCode` varchar(10) NOT NULL, `Name` char(20) NOT NULL, `Number Of Flights` INTEGER, `Headquater` varchar(20), PRIMARY KEY(`AirlineCode`))

CREATE TABLE `Booking` (`BookingID` varchar(10) NOT NULL, `BookingTime` time NOT NULL, `BookingDate` date NOT NULL, `TransactionID` varchar(10) NOT NULL, `FlightNumber` INTEGER NOT NULL, `PassengerID` varchar(10), PRIMARY KEY(`BookingID`))

CREATE TABLE `Flight` (`FlightNumber` INTEGER NOT NULL, `AirlineCode` varchar(10) NOT NULL, `Origin` NUMERIC NOT NULL, `Destination` NUMERIC NOT NULL, `Price` INTEGER NOT NULL, `Departure Time` time NOT NULL, `Arrival Time` time NOT NULL, `Days` varchar(7) NOT NULL, `Seats Available` INTEGER NOT NULL, PRIMARY KEY(`FlightNumber`))

CREATE TABLE Passenger (`Passenger ID` varchar(10) primary key not null, `First Name` char(10) not null, `Last Name` char(10), `Age` integer not null, `Sex` char(1) not null, `Origin` char(20), `Destination` char(20), `Phone Number` integer check(`Phone Number` <= 9999999999 and `Phone Number` >= 0), `Date of Travel` date, `Budget` integer)

CREATE TABLE `Transaction` (`TransactionID` varchar(10) NOT NULL, `BookingID` varchar(10) NOT NULL, `PassengerID` varchar(10) NOT NULL, `Amount` INTEGER NOT NULL, PRIMARY KEY(`TransactionID`))

Table Details

- Booking Table

Booking ID	Booking Time	Booking Date	Transaction ID	Flight Number	Passenger ID
B111	16:00	2019-10-18	TX111	11111	1P111
B112	16:02	2019-10-18	TX112	11111	1P112
B113	10:00	2019-09-30	TX113	11121	1P120
B114	01:00	2019-10-21	TX114	11113	1P115
B115	08:00	2019-10-25	TX115	11114	1P113

- Transaction Table

TransactionID	BookingID	PassengerID	Amount
TX111	B111	1P111	6000
TX112	B112	1P112	6000
TX113	B113	1P120	6500
TX114	B114	1P115	8000
TX115	B115	1P113	9000

- Airline Table

AirlineCode	Name	Number Of Flights	Headquater
3FE22	Fly Emirates	25	Delhi
IGO89	Indigo	18	Banglore
1JA12	Jet Airways	20	Mumbai
QA362	Qatar Airways	30	Delhi
SPJ23	Spicejet	12	Hyderabad

- Passenger Table

Passenger ID	First Name	Last Name	Age	Sex	Origin	Destination	Phone Number	Date of Travel	Budget
1P111	Ankit	Dimri	20	M	Mumbai	Delhi	9920650556	2019-11-21	10000
1P112	Aayushi	Singh	20	F	Mumbai	Delhi	7738819485	2019-11-21	8000
1P113	Dheeraj	Chaudhary	19	M	Banglore	Mumbai	8955674124	2019-10-15	8000
1P114	Somyadeep	Shrivastava	20	M	Hyderabad	Delhi	7845142562	2019-12-25	10000
1P115	Sujeet	Mourya	21	M	Delhi	Banglore	8888547111	2019-12-12	12000
1P116	Akshay	Jain	20	M	Banglore	Mumbai	8521463795	2019-11-30	6000
1P117	Kapil	Jhade	20	M	Hyderabad	Delhi	8957642157	2019-10-6	6000
1P118	Tarun	Gupta	21	M	Hyderabad	Delhi	6847512497	2019-10-6	4500
1P119	Priya		20	F	Delhi	Banglore	9896587421	2019-11-10	8000
1P120	Srushti	Desai	21	F	Mumbai	Delhi	8895741358	2019-12-23	11000
1P121	Aman	Gupta	20	F	Mumbai	Banglore	9687451235	2019-11-11	5000

- Flight Table

Flight Number	Airline Code	Origin	Destination	Price	Departure Time	Arrival Time	Days	Seats Available
11111	1JA12	Mumbai	Delhi	6000	12:00	14:00	MTWTFSS	560
11112	IGO89	Mumbai	Hyderabad	4500	16:00	17:30	M-W--S-	250
11113	QA362	Delhi	Banglore	8000	13:00	16:00	MTWTFS-	500
11114	3FE22	Banglore	Mumbai	9000	08:00	09:30	MTWTFSS	450
11115	SPJ23	Hyderabad	Delhi	5000	11:00	14:00	M--TF--	150
11117	QA362	Banglore	Mumbai	8000	10:00	11:25	MTWTF--	300
11118	SPJ23	Mumbai	Hyderabad	5000	06:00	08:00	M--TF--	250
11119	1JA12	Dellhi	Banglore	6999	11:00	14:00	--WT-SS	300
11120	QA362	Mumbai	Delhi	5899	09:00	11:00	MTWTFSS	500
11121	3FE22	Mumbai	Delhi	6500	10:00	12:00	-TWTF-S	500

ER Diagram
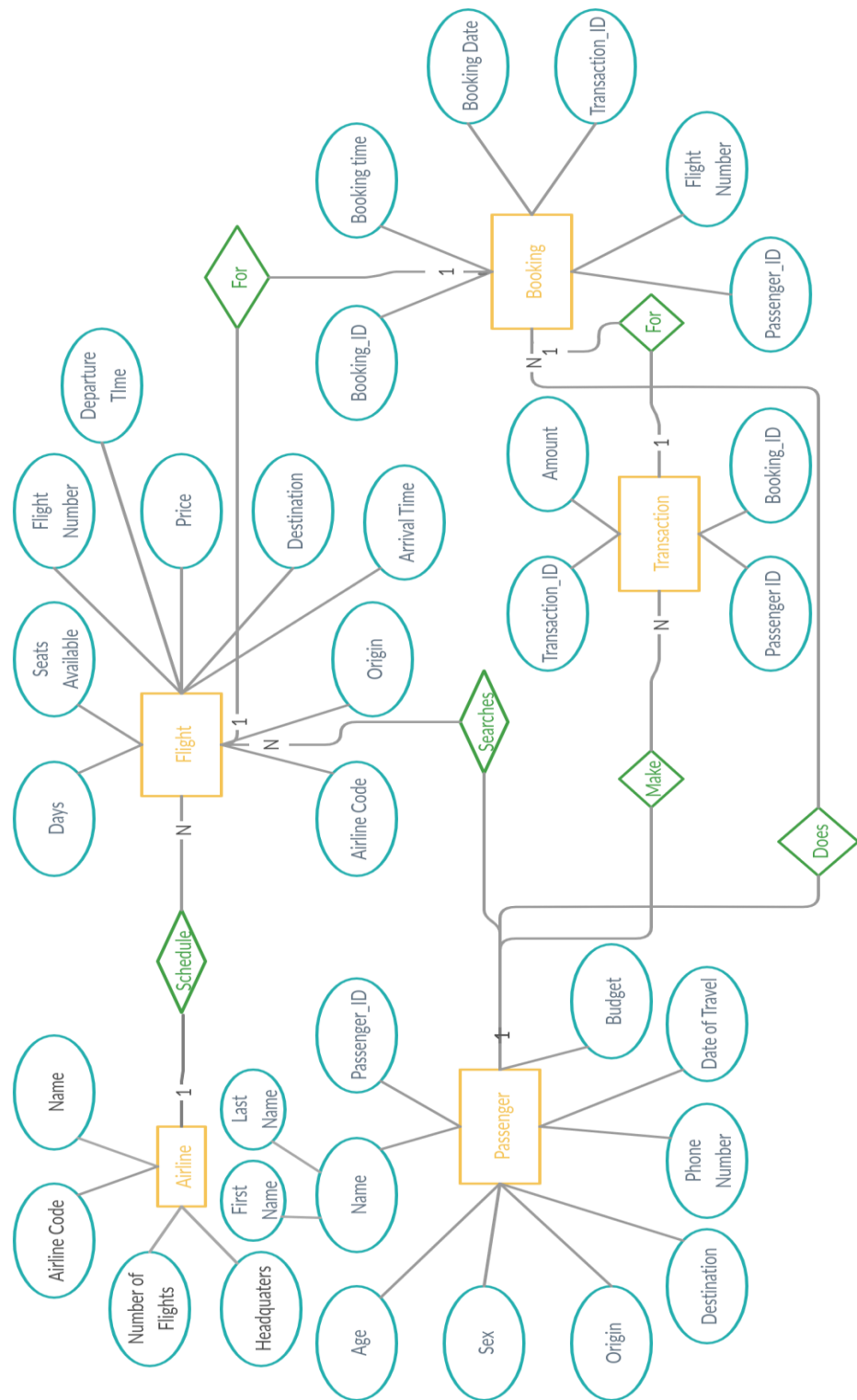
Inserting Values

INSERT INTO "Passenger" ("Passenger ID","First Name","Last Name","Age","Sex","Origin","Destination","Phone Number","Date of Travel","Budget") VALUES ('1P111','Ankit','Dimri',20,'M','Mumbai','Delhi',9920650556,'2019-11-21',10000),
 ('1P112','Aayushi','Singh',20,'F','Mumbai','Delhi',7738819485,'2019-11-21',8000),
 ('1P113','Dheeraj','Chaudhary',19,'M','Banglore','Mumbai',8955674124,'2019-10-15',8000),
 ('1P114','Somyadeep ','Shrivastava',20,'M','Hyderabad','Delhi',7845142562,'2019-12-25',10000),
 ('1P115','Sujeet','Mourya',21,'M','Delhi','Banglore',8888547111,'2019-12-12',12000),
 ('1P116','Akshay','Jain',20,'M','Banglore','Mumbai',8521463795,'2019-11-30',6000),
 ('1P117','Kapil','Jhade',20,'M','Hyderabad','Delhi',8957642157,'2019-10-6',6000),
 ('1P118','Tarun','Gupta',21,'M','Hyderabad','Delhi',6847512497,'2019-10-6',4500),
 ('1P119','Priya','',20,'F','Delhi','Banglore',9896587421,'2019-11-10',8000),
 ('1P120','Srushti','Desai',21,'F','Mumbai','Delhi',8895741358,'2019-12-23',11000),
 ('1P121','Aman','Gupta',20,'F','Mumbai','Banglore',9687451235,'2019-11-11',5000);

INSERT INTO "Flight" ("FlightNumber","AirlineCode","Origin","Destination","Price","Departure Time","Arrival Time","Days","Seats Available") VALUES
(11111,'1JA12','Mumbai','Delhi',6000,'12:00','14:00','MTWTFSS',560),
 (11112,'IGO89','Mumbai','Hyderabad',4500,'16:00','17:30','M-W--S-',250),
 (11113,'QA362','Delhi','Banglore',8000,'13:00','16:00','MTWTFS-',500),
 (11114,'3FE22','Banglore','Mumbai',9000,'08:00','09:30','MTWTFSS',450),
 (11115,'SPJ23','Hyderabad','Delhi',5000,'11:00','14:00','M--TF--',150),
 (11117,'QA362','Banglore','Mumbai',8000,'10:00','11:25','MTWTF--',300),
 (11118,'SPJ23','Mumbai','Hyderabad',5000,'06:00','08:00','M--TF--',250),
 (11119,'1JA12','Dellhi','Banglore',6999,'11:00','14:00','--WT-SS',300),
 (11120,'QA362','Mumbai','Delhi',5899,'09:00','11:00','MTWTFSS',500),
 (11121,'3FE22','Mumbai','Delhi',6500,'10:00','12:00','-TWTF-S',500);

INSERT INTO "Airline" ("AirlineCode","Name","Number Of Flights","Headquater") VALUES ('1JA12','Jet Airways',20,'Mumbai'),
 ('SPJ23','Spicejet',12,'Hyderabad'),
 ('QA362','Qatar Airways',30,'Delhi'),
 ('3FE22','Fly Emirates',25,'Delhi'),
 ('IGO89','Indigo',18,'Banglore');

INSERT INTO "Booking"
("BookingID","BookingTime","BookingDate","TransactionID","FlightNumber","PassengerID")
VALUES ('B111','16:00','2019-10-18','TX111',11111,'1P111'),
 ('B112','16:02','2019-10-18','TX112',11111,'1P112'),
 ('B113','10:00','2019-09-30','TX113',11121,'1P120'),
 ('B114','01:00','2019-10-21','TX114',11113,'1P115'),
 ('B115','08:00','2019-10-25','TX115',11114,'1P113');

INSERT INTO "Transaction" ("TransactionID","BookingID","PassengerID","Amount") VALUES ('TX111','B111','1P111',6000),
 ('TX112','B112','1P112',6000),
 ('TX113','B113','1P120',6500),
 ('TX114','B114','1P115',8000),
 ('TX115','B115','1P113',9000);

Queries

1. SELECT * from Passenger NATURAL JOIN Booking;

2. SELECT * FROM Passenger INNER JOIN Booking
   WHERE Passenger.PassengerID = Booking.BookingID;

3. SELECT PassengerID FROM Passenger NATURAL JOIN Booking WHERE
   Passenger.Sex="M";

4. SELECT Name FROM Passenger NATURAL JOIN Booking NATURAL JOIN Transaction
   WHERE Passenger.Sex='M';

5. SELECT Passenger.PassengerID,Booking.BookingDate FROM Passenger INNER JOIN
   Booking ON Passenger.PassengerID = Booking.BookingID;

6. SELECT * FROM BOOKING, TRANSACTION WHERE BOOKING.TRANSACTIONID =
   TRANSACTION.TRANSACTIONID;

7. SELECT NAME, FIRSTNAME FROM AIRLINES, PASSENGER WHERE AIRLINE.NAME
   = "RAMESH" AND PASSENGER.SEX = "M";

OUTPUT

1.

1P111	Ankit	Dimri	20	M	Mumbai	Delhi	99206 50556	2019-11-21	10000	B111	16:00	2019-10-18	TX111	11111	1P111
1P111	Ankit	Dimri	20	M	Mumbai	Delhi	99206 50556	2019-11-21	10000	B112	16:02	2019-10-18	TX112	11111	1P112
1P111	Ankit	Dimri	20	M	Mumbai	Delhi	99206 50556	2019-11-21	10000	B113	10:00	2019-09-30	TX113	11121	1P120
1P111	Ankit	Dimri	20	M	Mumbai	Delhi	99206 50556	2019-11-21	10000	B114	01:00	2019-10-21	TX114	11113	1P115
1P111	Ankit	Dimri	20	M	Mumbai	Delhi	99206 50556	2019-11-21	10000	B115	08:00	2019-10-25	TX115	11114	1P113
1P112	Aayushi	Singh	20	F	Mumbai	Delhi	77388 19485	2019-11-21	8000	B111	16:00	2019-10-18	TX111	11111	1P111
1P112	Aayushi	Singh	20	F	Mumbai	Delhi	77388 19485	2019-11-21	8000	B112	16:02	2019-10-18	TX112	11111	1P112
1P112	Aayushi	Singh	20	F	Mumbai	Delhi	77388 19485	2019-11-21	8000	B113	10:00	2019-09-30	TX113	11121	1P120
1P112	Aayushi	Singh	20	F	Mumbai	Delhi	77388 19485	2019-11-21	8000	B114	01:00	2019-10-21	TX114	11113	1P115
1P112	Aayushi	Singh	20	F	Mumbai	Delhi	77388 19485	2019-11-21	8000	B115	08:00	2019-10-25	TX115	11114	1P113
1P113	Dheeraj	Chaudhary	19	M	Banglore	Mumbai	89556 74124	2019-10-15	8000	B111	16:00	2019-10-18	TX111	11111	1P111
1P113	Dheeraj	Chaudhary	19	M	Banglore	Mumbai	89556 74124	2019-10-15	8000	B112	16:02	2019-10-18	TX112	11111	1P112
1P113	Dheeraj	Chaudhary	19	M	Banglore	Mumbai	89556 74124	2019-10-15	8000	B113	10:00	2019-09-30	TX113	11121	1P120
1P113	Dheeraj	Chaudhary	19	M	Banglore	Mumbai	89556 74124	2019-10-15	8000	B114	01:00	2019-10-21	TX114	11113	1P115
1P113	Dheeraj	Chaudhary	19	M	Banglore	Mumbai	89556 74124	2019-10-15	8000	B115	08:00	2019-10-25	TX115	11114	1P113
1P114	Somyadeep	Shrivastava	20	M	Hyderabad	Delhi	78451 42562	2019-12-25	10000	B111	16:00	2019-10-18	TX111	11111	1P111
1P114	Somyadeep	Shrivastava	20	M	Hyderabad	Delhi	78451 42562	2019-12-25	10000	B112	16:02	2019-10-18	TX112	11111	1P112
1P114	Somyadeep	Shrivastava	20	M	Hyderabad	Delhi	78451 42562	2019-12-25	10000	B113	10:00	2019-09-30	TX113	11121	1P120
1P114	Somyadeep	Shrivastava	20	M	Hyderabad	Delhi	78451 42562	2019-12-25	10000	B114	01:00	2019-10-21	TX114	11113	1P115
1P114	Somyadeep	Shrivastava	20	M	Hyderabad	Delhi	78451 42562	2019-12-25	10000	B115	08:00	2019-10-25	TX115	11114	1P113

1P115	Sujeet	Mourya	21	M	Delhi	Banglore	88885 47111	2019-12-12	12000	B111	16:00	2019-10-18	TX111	11111	1P111
1P115	Sujeet	Mourya	21	M	Delhi	Banglore	88885 47111	2019-12-12	12000	B112	16:02	2019-10-18	TX112	11111	1P112
1P115	Sujeet	Mourya	21	M	Delhi	Banglore	88885 47111	2019-12-12	12000	B113	10:00	2019-09-30	TX113	11121	1P120
1P115	Sujeet	Mourya	21	M	Delhi	Banglore	88885 47111	2019-12-12	12000	B114	01:00	2019-10-21	TX114	11113	1P115
1P115	Sujeet	Mourya	21	M	Delhi	Banglore	88885 47111	2019-12-12	12000	B115	08:00	2019-10-25	TX115	11114	1P113
1P116	Akshay	Jain	20	M	Banglore	Mumbai	85214 63795	2019-11-30	6000	B111	16:00	2019-10-18	TX111	11111	1P111
1P116	Akshay	Jain	20	M	Banglore	Mumbai	85214 63795	2019-11-30	6000	B112	16:02	2019-10-18	TX112	11111	1P112
1P116	Akshay	Jain	20	M	Banglore	Mumbai	85214 63795	2019-11-30	6000	B113	10:00	2019-09-30	TX113	11121	1P120
1P116	Akshay	Jain	20	M	Banglore	Mumbai	85214 63795	2019-11-30	6000	B114	01:00	2019-10-21	TX114	11113	1P115
1P116	Akshay	Jain	20	M	Banglore	Mumbai	85214 63795	2019-11-30	6000	B115	08:00	2019-10-25	TX115	11114	1P113
1P117	Kapil	Jhade	20	M	Hyderabad	Delhi	89576 42157	2019-10-6	6000	B111	16:00	2019-10-18	TX111	11111	1P111
1P117	Kapil	Jhade	20	M	Hyderabad	Delhi	89576 42157	2019-10-6	6000	B112	16:02	2019-10-18	TX112	11111	1P112
1P117	Kapil	Jhade	20	M	Hyderabad	Delhi	89576 42157	2019-10-6	6000	B113	10:00	2019-09-30	TX113	11121	1P120
1P117	Kapil	Jhade	20	M	Hyderabad	Delhi	89576 42157	2019-10-6	6000	B114	01:00	2019-10-21	TX114	11113	1P115
1P117	Kapil	Jhade	20	M	Hyderabad	Delhi	89576 42157	2019-10-6	6000	B115	08:00	2019-10-25	TX115	11114	1P113
1P118	Tarun	Gupta	21	M	Hyderabad	Delhi	68475 12497	2019-10-6	4500	B111	16:00	2019-10-18	TX111	11111	1P111
1P118	Tarun	Gupta	21	M	Hyderabad	Delhi	68475 12497	2019-10-6	4500	B112	16:02	2019-10-18	TX112	11111	1P112
1P118	Tarun	Gupta	21	M	Hyderabad	Delhi	68475 12497	2019-10-6	4500	B113	10:00	2019-09-30	TX113	11121	1P120
1P118	Tarun	Gupta	21	M	Hyderabad	Delhi	68475 12497	2019-10-6	4500	B114	01:00	2019-10-21	TX114	11113	1P115
1P118	Tarun	Gupta	21	M	Hyderabad	Delhi	68475 12497	2019-10-6	4500	B115	08:00	2019-10-25	TX115	11114	1P113
1P119	Priya		20	F	Delhi	Banglore	98965 87421	2019-11-10	8000	B111	16:00	2019-10-18	TX111	11111	1P111
1P119	Priya		20	F	Delhi	Banglore	98965	2019-	8000	B112	16:0	2019-	TX112	11111	1P112

						87421	11-10			2	10-18			
1P119	Priya		20	F	Delhi	Banglore	98965 87421	2019-11-10	8000	B113	10:00	2019-09-30	TX113	11121	1P120
1P119	Priya		20	F	Delhi	Banglore	98965 87421	2019-11-10	8000	B114	01:00	2019-10-21	TX114	11113	1P115
1P119	Priya		20	F	Delhi	Banglore	98965 87421	2019-11-10	8000	B115	08:00	2019-10-25	TX115	11114	1P113
1P120	Srushti	Desai	21	F	Mumbai	Delhi	88957 41358	2019-12-23	11000	B111	16:00	2019-10-18	TX111	11111	1P111
1P120	Srushti	Desai	21	F	Mumbai	Delhi	88957 41358	2019-12-23	11000	B112	16:02	2019-10-18	TX112	11111	1P112
1P120	Srushti	Desai	21	F	Mumbai	Delhi	88957 41358	2019-12-23	11000	B113	10:00	2019-09-30	TX113	11121	1P120
1P120	Srushti	Desai	21	F	Mumbai	Delhi	88957 41358	2019-12-23	11000	B114	01:00	2019-10-21	TX114	11113	1P115
1P120	Srushti	Desai	21	F	Mumbai	Delhi	88957 41358	2019-12-23	11000	B115	08:00	2019-10-25	TX115	11114	1P113
1P121	Aman	Gupta	20	F	Mumbai	Banglore	96874 51235	2019-11-11	5000	B111	16:00	2019-10-18	TX111	11111	1P111
1P121	Aman	Gupta	20	F	Mumbai	Banglore	96874 51235	2019-11-11	5000	B112	16:02	2019-10-18	TX112	11111	1P112
1P121	Aman	Gupta	20	F	Mumbai	Banglore	96874 51235	2019-11-11	5000	B113	10:00	2019-09-30	TX113	11121	1P120
1P121	Aman	Gupta	20	F	Mumbai	Banglore	96874 51235	2019-11-11	5000	B114	01:00	2019-10-21	TX114	11113	1P115
1P121	Aman	Gupta	20	F	Mumbai	Banglore	96874 51235	2019-11-11	5000	B115	08:00	2019-10-25	TX115	11114	1P113