DDL STATEMENTS

create table travel.Passenger(booking_id
varchar(15) primary key, name
varchar(20),
age int ,
gender varchar(1) not null, blood_group
varchar(3) not null, start_place varchar(30)
not null, verification_id varchar(30) not
null);

create table travel.Mode_Transport(
transport_no varchar(10) primary key,
booking_id varchar(15), transport_type
varchar(30) not null,
foreign key(booking_id)references Passenger(booking_id) on delete
set null);

create table travel.Ticket(ticket_id
varchar(10) primary key, transport_no
varchar(10), ticket_date date not null,
departure_time time not null, seat_no
int not null,
foreign key(transport_no)references Mode_Transport(transport_no)
on delete set null);

create table travel.Destination(pin int
primary key,
ticket_id varchar(10), arrival_place
varchar(30) not null,
foreign key(ticket_id)references Ticket(ticket_id) on delete set null);

create table travel.Cost(
ticket_id varchar(10), fare int,
travel_time time,
 foreign key(ticket_id)references Ticket(ticket_id) on delete set null);

create table travel.passenger_log(
pass_bookid varchar(15),
pass_modifiedName varchar(15),
pass_OldName varchar(30),
modified_at_on datetime, action_done
varchar(20));

ASSERTION :

/*Assertion on place constraint that starting place and arrival place must not be same */

```
create ASSERTION place_constraint check(not exists(
select * from Passenger p,Mode_transport mt,ticket t,destination d
where p.start_place=d.arrival_place and
p.booking_id=mt.booking_id and mt.transport_no=t.transport_no
and t.ticket_id=d.ticket_id));
```

```
use travel;
```

TRIGGERS

```
create trigger upcase_id before
INSERT on Passenger for each
row
SET NEW.booking_id=UPPER(NEW.booking_id);
```

```
create trigger upcase_tickid before
insert on Ticket
for each row
SET NEW.ticket_id=UPPER(NEW.ticket_id);
```

```
create trigger upcase_transno before
insert on Mode_Transport for each
row
SET NEW.transport_no=UPPER(NEW.transport_no);
```

```
create trigger pass_modify
before update on passenger for
each row
insert into passenger_log
set action_done='update operation',
    pass_bookid=OLD.booking_id,
    pass_OldName=OLD.name,
    pass_modifiedname=NEW.name,
    modified_at_on=NOW();
```

use travel;

DML STATEMENTS

```sql
insert into Passenger
values('123ERTY','SHIVA',48,'M','B+','Mysuru','Aadhar Card'); insert into
Passenger values('345gYTF','JOHN',34,'M','B+','Shimoga','Voter ID');
insert into Passenger
values('893NJGK','SPOORTHI',21,'F','AB+','Bengaluru','Voter ID');
insert into Passenger
values('345SFDG','SIMON',36,'M','AB+','Kochi','Aadhar Card'); insert into
Passenger values('897IOOU','KUMAR',26,'M','O+','Delhi','Voter ID');
insert into Passenger
values('345sgdf','FATHIMA',51,'F','B+','Mandya','Driving License');
insert into Passenger
values('123TUIY','ARCHANA',20,'F','B+','Chandigarh','Aadhar Card');
insert into Passenger
values('133EDtY','ABDUL',23,'M','AB+','Haryana','Aadhar Card'); insert
into Passenger
values('453RItK','DIVAKAR',43,'M','A-','Chennai','Aadhar Card'); insert
into Passenger
values('223SDTY','RANJINI',35,'F','B+','Bengaluru','Voter ID');

insert into Mode_Transport
values('1237800YT','123ERTY','Train');
insert into Mode_Transport values('99YT','345GYTF','Flight'); insert into
Mode_Transport values('34rT','893NJGK','Flight'); insert into
Mode_Transport values('kA-01-2233','345SFDG','Bus'); insert into
Mode_Transport values('KL-31-2893','897IOOU','Bus'); insert into
Mode_Transport values('dL-51-2290','345SGDF','Bus'); insert into
Mode_Transport values('MH-01-1333','123TUIY','Bus'); insert into
Mode_Transport values('44jK','133EDTY','Flight'); insert into
Mode_Transport values('4560003JH','453RITK','Train'); insert into
Mode_Transport values('89UT','223SDTY','Flight');
```

```sql
insert into Ticket
values('12433GT','1237800YT','2020-12-08','15:30:25',08);
insert into Ticket
values('47834hY','99YT','2020-11-24','01:30:25',15);
insert into Ticket
values('10423KJ','34RT','2020-11-18','09:35:00',74);
insert into Ticket
values('10345Po','KA-01-2233','2020-12-17','10:15:00',15);
insert into Ticket
values('13456nJ','KL-31-2893','2020-11-21','19:25:00',42);
insert into Ticket
values('12378FG','DL-51-2290','2020-11-11','12:35:00',43);
insert into Ticket
values('14563gH','MH-01-1333','2020-11-01','23:30:00',12);
insert into Ticket
values('14442FG','44JK','2020-12-19','17:50:00',22);
insert into Ticket
values('13456HY','4560003JH','2020-12-12','20:40:00',15);
insert into Ticket
values('13335pY','89UT','2020-12-14','22:10:00',48);


insert into Destination values(1000085,'12433GT','Bengaluru');
insert into Destination values(2003625,'47834HY','Mysore');
insert into Destination values(5700009,'10423KJ','Mangalore');
insert into Destination values(9800005,'10345PO','Bengaluru');
insert into Destination values(7500603,'13456NJ','Kolkata');
insert into Destination values(9500004,'12378FG','Mysuru');
insert into Destination values(5400026,'14563GH','Lucknow');
insert into Destination values(5340008,'14442FG','Bengaluru');
insert into Destination values(8500012,'13456HY','Kochi');
insert into Destination values(5600008,'13335PY','Noida');

insert into Cost values('12433GT',540,'3:30:00');
insert into Cost values('47834HY',1750,'6:15:09');
insert into Cost values('10423KJ',4500,'4:40:00');
insert into Cost values('10345PO',250,'00:40:45');
insert into Cost values('13456NJ',350,'3:45:45');
insert into Cost values('12378FG',850,'05:40:45');
insert into Cost values('14563GH',375,'02:00:00');
insert into Cost values('14442FG',2300,'05:40:45');
```

```
insert into Cost values('13456HY',450,'04:35:45'); insert
into Cost values('13335PY',3500,'05:20:45');


alter table Passenger drop column blood_group;


alter table ticket add column distance varchar(30);


update    ticket SET distance='200km' where
ticket_id='12433GT';
update    ticket SET distance='300km' where
ticket_id='47834HY';
update    ticket SET distance='240km' where ticket_id='10423KJ';
update    ticket SET distance='250km' where ticket_id='10345PO';
update    ticket SET distance='600km' where ticket_id='13456NJ';
update    ticket SET distance='340km'  where ticket_id='12378FG';
update    ticket SET distance='670km' where
ticket_id='14563GH';
update    ticket SET distance='340km' where
ticket_id='14442FG';
update    ticket SET distance='590km' where
ticket_id='13456HY';
update    ticket SET distance='450km' where  ticket_id='13335PY';
```

VIEWS

```
create view flight_passengers AS
select name,gender,age,transport_type from
Passenger p,Mode_Transport m where
p.booking_id=m.booking_id AND
transport_type='Flight';


create view bus_passengers AS
select name,gender,age,transport_type from
Passenger p,Mode_Transport m
where p.booking_id=m.booking_id AND transport_type='Bus';
```

```sql
create view train_passengers AS
select name,gender,age,transport_type
from Passenger p,Mode_Transport m
where p.booking_id=m.booking_id AND transport_type='Train';


create view ticket_details AS
select name,ticket_id,ticket_date,departure_time
from Passenger p,Mode_transport m,Ticket t
where p.booking_id=m.booking_id AND
m.transport_no=t.transport_no;



update passenger set name='SAMUEL' where
booking_id='345SFDG';
update passenger set name='SPOORTHI S' where
booking_id='893NJGK';
update passenger set name='DIVAKARA' where
booking_id='453RItK';
```

QUERIES:

```sql
select *from passenger_log;
select * from flight_passengers;
select * from bus_passengers;
select * from train_passengers;
select * from ticket_details;



/*passenger details based on transport type*/

select p.booking_id,name,age,gender,transport_no
from Passenger p,Mode_transport mt
where p.booking_id=mt.booking_id and transport_type='Train';

select p.booking_id,name,age,gender,transport_no
from Passenger p,Mode_transport mt
where p.booking_id=mt.booking_id and transport_type='Bus';
```

```sql
select p.booking_id,name,age,gender,transport_no
from Passenger p,Mode_transport mt
where p.booking_id=mt.booking_idand
transport_type='Flight';
```

/*general query showing start and destination of passengers*/

```sql
select name,age,gender,start_place,arrival_place
from passenger p,mode_transport mt,ticket t,destination d
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id;
```

/*details based on fare*/

```sql
select name,age,gender,start_place,arrival_place
from passenger p,mode_transport mt,ticket t,destination d,cost
c
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id and
t.ticket_id=c.ticket_id and fare>1000;
```

```sql
select name,age,gender,start_place,arrival_place
from passenger p,mode_transport mt,ticket t,destination d,cost
c
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id and
t.ticket_id=c.ticket_id and fare<1000;
```

/*gives number of specific transport type*/

```sql
select transport_no
from   mode_transport
where transport_type='Bus';
```

```sql
select transport_no
from mode_transport
where transport_type='Train';
```

```sql
select transport_no
```

```sql
from mode_transport
where transport_type='Flight';

/*passenger details on particular dates*/

select p.booking_id,name,age,ticket_id,seat_no,transport_type
from passenger p,ticket t,mode_transport mt
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_date='2020-12-17';

select p.booking_id,name,age,ticket_id,seat_no,transport_type
from passenger p,ticket t,mode_transport mt
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_date='2020-11-01';

select p.booking_id,name,age,ticket_id,seat_no,transport_type
from passenger p,ticket t,mode_transport mt
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_date='2020-12-12';

select p.booking_id,name,age,ticket_id,seat_no,transport_type
from passenger p,ticket t,mode_transport mt
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_date='2020-11-24';

/*passenger details based on destination*/

select name,age,gender,start_place,transport_type
from passenger p,mode_transport mt,ticket t,destination d
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id and
d.arrival_place='Bengaluru';


select name,age,gender,start_place,transport_type
from passenger p,mode_transport mt,ticket t,destination d
where p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id and
d.arrival_place='Kolkata';
```

```sql
 select name,age,gender,start_place,transport_type
from passenger p,mode_transport mt,ticket t,destination d where
p.booking_id=mt.booking_id and mt.transport_no=t.transport_no
and t.ticket_id=d.ticket_id and ( d.arrival_place='mysore'or
d.arrival_place='mysuru');

/*passenger deatails based on starting place*/

select name,age,gender,transport_type,arrival_place from
passenger p,mode_transport mt,ticket t,destination d where
p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id and
p.start_place='Bengaluru';


select name,age,gender,transport_type,arrival_place from
passenger p,mode_transport mt,ticket t,destination d where
p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id and
p.start_place='shimoga';

select name,age,gender,transport_type,arrival_place from
passenger p,mode_transport mt,ticket t,destination d where
p.booking_id=mt.booking_id and
mt.transport_no=t.transport_no and t.ticket_id=d.ticket_id and
p.start_place='chennai';
```