A travel company TravelOnTheGo maintains the record of passengers and price to travel between two cities, for bus type (Sitting and Sleeper).

1) You are required to create two tables PASSENGER and PRICE with the following attributes and properties

PASSENGER

(Passenger\_name varchar

Category varchar

Gender varchar

Boarding\_City varchar

Destination\_City varchar

Distance int

Bus\_Type varchar

);

PRICE

(

Bus\_Type varchar

Distance int

Price int

)

Sol:

create table PASSENGER

(Passenger\_name varchar(20),

Category varchar(20),

Gender varchar(20),

Boarding\_City varchar(20),

Destination\_City varchar(20),

Distance int,

Bus\_Type varchar(20)

);

create table PRICE

(

Bus\_Type varchar(20),

Distance int,

Price int

);

2) Insert the following data in the tables

Passenger\_nam Category Gender Boarding\_City Destination\_City Distance Bus\_Type

Sejal AC F Bengaluru Chennai 350 Sleeper

Anmol Non-AC M Mumbai Hyderabad 700 Sitting

Pallavi AC F Panaji Bengaluru 600 Sleeper

Khusboo AC F Chennai Mumbai 1500 Sleeper

Udit Non-AC M Trivandrum panaji 1000 Sleeper

Ankur AC M Nagpur Hyderabad 500 Sitting

Hemant Non-AC M panaji Mumbai 700 Sleeper

Manish Non-AC M Hyderabad Bengaluru 500 Sitting

Piyush AC M Pune Nagpur 700 Sitting

Bus\_Type Distance Price

Sleeper 350 770

Sleeper 500 1100

Sleeper 600 1320

Sleeper 700 1540

Sleeper 1000 2200

Sleeper 1200 2640

Sleeper 350 434

Sitting 500 620

Sitting 500 620

Sitting 600 744

Sitting 700 868

Sitting 1000 1240

Sitting 1200 1488

Sitting 1500 1860

SOL:

insert into passenger values('Sejal','AC','F','Bengaluru','Chennai',350,'Sleeper');

insert into passenger values('Anmol','Non-AC','M','Mumbai','Hyderabad',700,'Sitting');

insert into passenger values('Pallavi','AC','F','panaji','Bengaluru',600,'Sleeper');

insert into passenger values('Khusboo','AC','F','Chennai','Mumbai',1500,'Sleeper');

insert into passenger values('Udit','Non-AC','M','Trivandrum','panaji',1000,'Sleeper');

insert into passenger values('Ankur','AC','M','Nagpur','Hyderabad',500,'Sitting');

insert into passenger values('Hemant','Non-AC','M','panaji','Mumbai',700,'Sleeper');

insert into passenger values('Manish','Non-AC','M','Hyderabad','Bengaluru',500,'Sitting');

insert into passenger values('Piyush','AC','M','Pune','Nagpur',700,'Sitting');

select \* from passenger;

insert into price values('Sleeper',350,770);

insert into price values('Sleeper',500,1100);

insert into price values('Sleeper',600,1320);

insert into price values('Sleeper',700,1540);

insert into price values('Sleeper',1000,2200);

insert into price values('Sleeper',1200,2640);

insert into price values('Sleeper',350,434);

insert into price values('Sitting',500,620);

insert into price values('Sitting',500,620);

insert into price values('Sitting',600,744);

insert into price values('Sitting',700,868);

insert into price values('Sitting',1000,1240);

insert into price values('Sitting',1200,1488);

insert into price values('Sitting',1500,1860);

select \* from price;

3) How many females and how many male passengers travelled for a minimum distance of 600 KM s?

Sol:

select Gender, count(Gender) FROM Passenger where Distance>=600 group by Gender ;

Gender count(Gender)

M 4

F 2

4) Find the minimum ticket price for Sleeper Bus.

Sol:

select min(Price) from Price where Bus\_Type = 'Sleeper';

min(Price)

'434'

5) Select passenger names whose names start with character 'S'

Sol:

select Passenger\_Name FROM Passenger where Passenger\_Name like 'S%' order by Passenger\_Name;

Passenger\_Name

Sejal

6) Calculate price charged for each passenger displaying Passenger name, Boarding City, Destination City, Bus\_Type, Price in the output

Sol:

select a.Passenger\_name,a.Boarding\_City,a.Destination\_City,a.Bus\_type,b.Price from Passenger a , Price b where (a.Bus\_Type = b.Bus\_Type and a.Distance = b.Distance);

# Passenger\_name Boarding\_City Destination\_City Bus\_type Price

Sejal Bengaluru Chennai Sleeper 770

Pallavi panaji Bengaluru Sleeper 1320

Hemant panaji Mumbai Sleeper 1540

Udit Trivandrum panaji Sleeper 2200

Sejal Bengaluru Chennai Sleeper 434

Ankur Nagpur Hyderabad Sitting 620

Manish Hyderabad Bengaluru Sitting 620

Ankur Nagpur Hyderabad Sitting 620

Manish Hyderabad Bengaluru Sitting 620

Anmol Mumbai Hyderabad Sitting 868

Piyush Pune Nagpur Sitting 868

7) What is the passenger name and his/her ticket price who travelled in Sitting bus for a distance of 1000 KM s

Sol:

select a.Passenger\_name,b.Price from Passenger a ,Price b where (a.Bus\_Type = "Sitting" and b.Bus\_Type = "Sitting" and a.Distance = 700 and b.Distance=700);

Passenger\_name Price

Anmol 868

Piyush 868

8) What will be the Sitting and Sleeper bus charge for Pallavi to travel from Bangalore to Panaji?

Sol:

SELECT Price FROM Price where distance=(SELECT Distance FROM Passenger where passenger\_name = "Pallavi");

Price

1320

744

9) List the distances from the "Passenger" table which are unique (non-repeated distances) in descending order.

Sol:

SELECT distinct(Distance) FROM Passenger order by distance desc;

Distance

1500

1000

700

600

500

350

10) Display the passenger name and percentage of distance travelled by that passenger from the total distance travelled by all passengers without using user variables

Sol:

11) Display the distance, price in three categories in table Price

a) Expensive if the cost is more than 1000

b) Average Cost if the cost is less than 1000 and greater than 500

c) Cheap otherwise

Sol:

with total as ( select sum(distance) as total from Passenger)

select passenger\_Name,(distance / total.total)\*100 as percentage\_travel from Passenger,total ;

passenger\_Name percentage\_travel

Sejal 5.3435

Anmol 10.6870

Pallavi 9.1603

Khusboo 22.9008

Udit 15.2672

Ankur 7.6336

Hema nt 10.6870

Manish 7.6336

Piyush 10.6870

Sample output for 11th question

350 770 Average Cost

500 1100 Expensive

600 1320 Expensive

700 1540 Expensive

SOL:

SELECT Distance,Price,

CASE

WHEN

Price > 1000 THEN "Expensive"

WHEN Price <1000 and Price > 500 THEN "Average Cost"

ELSE "cheap" END as Cost FROM price;

Distance Price Cost

Distance Price Cost

350 770 Average Cost

500 1100 Expensive

600 1320 Expensive

700 1540 Expensive

1000 2200 Expensive

1200 2640 Expensive

350 434 cheap

500 620 Average Cost

500 620 Average Cost

600 744 Average Cost

700 868 Average Cost

1000 1240 Expensive

1200 1488 Expensive

1500 1860 Expensive