Great Learning

Travego Travellers

Introduction

Let's assume that you have to keep the record of the passengers and price to travel between two cities by bus, for types (Sitting and Sleeper).

The focus of this project is to learn to write different types SQL statements to insert and retrieve data from a database. For database storage we will use MySQL, information related to MySQL and several commands have already been discussed in weekly notebooks. You can refer to these to gather hints on functionality.

Program Organization

The simple program is structured in various layers.

1. To give an insight we have two tables **Passenger** and **Price.** Please find the more details in the attached ER diagram.
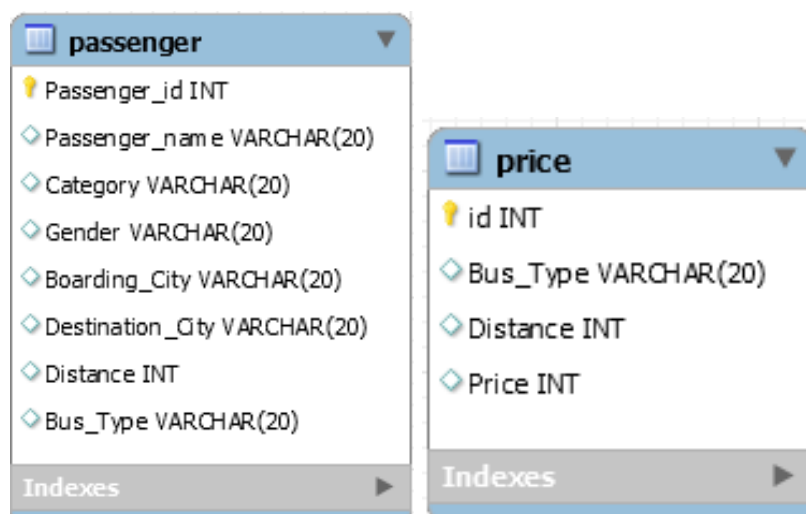
2. Following is the sample data. Please insert this data in the table *Passenger*. Do ensure that you have at least these data points available in the tables.

Passenger_id	Passenger_name	Category	Gender	Boarding_City	Destination_City	Distance	Bus_Type
1	Sejal	AC	F	Bengaluru	Chennai	350	Sleeper
2	Anmol	Non-AC	M	Mumbai	Hyderabad	700	Sitting
3	Pallavi	AC	F	Panaji	Bengaluru	600	Sleeper
4	Khusboo	AC	F	Chennai	Mumbai	1500	Sleeper
5	Udit	Non-AC	M	Trivandrum	Panaji	1000	Sleeper
6	Ankur	AC	M	Nagpur	Hyderabad	500	Sitting
7	Hemant	Non-AC	M	Panaji	Mumbai	700	Sleeper
8	Manish	Non-AC	M	Hyderabad	Bengaluru	500	Sitting
9	Piyush	AC	M	Pune	Nagpur	700	Sitting

Insert the following data in the table *Price*

id	Bus_type	Distance	Price
1	Sleeper	350	770
2	Sleeper	500	1100
3	Sleeper	600	1320
4	Sleeper	700	1540
5	Sleeper	1000	2200
6	Sleeper	1200	2640
7	Sleeper	1500	2700
8	Sitting	500	620
9	Sitting	600	744
10	Sitting	700	868
11	Sitting	1000	1240
12	Sitting	1200	1488
13	Sitting	1500	1860

Problem Statement

In this project you have to do the following activities…

- Create the two tables
- Insert data in these tables
- Retrieve the data from these tables based on the requirements mentioned below

1. (**Easy**) Creating the schema and required tables using MySQL workbench
    a. Create a schema named **Travego** and create the tables mentioned above with the mentioned column names. Also, declare the relevant datatypes for each feature/column in the dataset. (**5 marks**)
    b. Insert the data in the newly created tables. (**3 marks**)

2. (**Medium**) Perform read operation on the designed table created in the above task.
    a. How many female passengers traveled a minimum distance of 600 KMs? (**1 mark**)
    b. Write a query to display the passenger details whose travel distance is greater than 500 and who are traveling in a sleeper bus. (**2 marks**)
    c. Select passenger names whose names start with the character 'S'.(**2 marks**)
    d. Calculate the price charged for each passenger, displaying the Passenger name, Boarding City, Destination City, Bus type, and Price in the output. (**3 marks**)
    e. What are the passenger name(s) and the ticket price for those who traveled 1000 KMs Sitting in a bus? (**4 marks**)
    f. What will be the Sitting and Sleeper bus charge for Pallavi to travel from Bangalore to Panaji? (**5 marks**)
    g. Alter the column category with the value "Non-AC" where the Bus_Type is sleeper (**2 marks**)
    h. Delete an entry from the table where the passenger name is Piyush and commit this change in the database. (**1 mark**)
    i. Truncate the table passenger and comment on the number of rows in the table (explain if required). (**1 mark**)
    j. Delete the table passenger from the database. (**1 mark**)

Expected files

1. SQL scripts for Table creation and data insertion in the table. **Task-1**
2. SQL scripts for all the select queries. **Task-2**.

Program Instructions

1. You need MySQL installed in your system to verify the scripts that you are writing. Do install **MySQL** and **MySQL Workbench**.
2. Write the SQL scripts that will have all the required statements to perform **Task-1** and **Task-2**.
3. Once the program is ready to submit, zip the parent folder **C04-Project02-Travego Travelers,** and upload the new zip file as **C04-Project02-Travego Travellers.zip**. It is now ready for evaluation.