SSN COLLEGE OF ENGINEERING
KALAVAKKAM-603 110

DEPARTMENT OF INFORMATION TECHNOLOGY

CS1307 – Database Management Systems Lab

Exercise No.5 - SQL Queries using Set operators, Joins and Subqueries

Create the following tables :

Bus-details

1. Bus_code(primary key)   number
2. Bus_desc   varchar

Bus-route

1. Route_id(primary key)   number
2. Route_no(unique)   number
3.   Bus_code(foreign key)   number
4. Origin   Varchar
5. destination   varchar
6. fare   number
7. dist   number
8. capacity   number

Journey

1. Journey_id(primary key)   number
2. date of Journey(Not Null)   date
3. Time(Not Null)   varchar2
4. Route_id(foreign key)   number
5. Bus_code(foreign key)   number

Ticket

1. Journey_id(foreign key)   number
2. Ticket_no(primary key)   number
3. Date of Birth   date

4. Date of Journey   date
5. Time(Not Null)   varchar2
6. Station   varchar
7. Origin(Not Null)   Varchar
   8. destination(Not Null)   varchar
9. Adults   number
10. Total fare   number
11. Route_id(foreign key)   number

Ticket_detail

1. Ticket_no   number
2.   Name   varchar
3. Sex   char
4. Age   number
5. Fare   number

Queries

1. Display the bus description which is having the least capacity.
2. How many buses are having destination as Chennai?
   3. How many passengers are traveling below 21 years of age?
4. Display the bus description which is having the highest fare.
5. Display the names of the passengers who have booked their ticket in the month of January.
6. Display the description and Bus Code of the bus whose fare is greater than the average fare in the table.
7. How many female passengers are traveling in the Deluxe Bus?
8. How many male passengers are traveling in the Super Fast Bus?
9. Display the names of the passengers who departure from Bangalore.
10. Display the journey time of the passenger "John".
11. Display the bus description which are neither originating from Chennai nor reaching Chennai.
12. Select rows from Bus route such that the route id's are greater than any of the ticket nos with J_id as 02 in the journey table.
13. Select rows from Bus route such that the route id's are greater than all the ticket nos with J_id as 02 in the journey table.

14. Select rows from ticket such that the ticket number exceeds the average of the total fare and the origin for such number should be Chennai.
15.   Select distinct route id's from bus route and ticket tables.