

# MySQL Assignment

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Create the following tables for FMS(Flight Management System):

The Passenger table contains information about passengers in the flight.

Passenger(passenger\_id,passenger\_name,passenger\_email,passenger\_dob)

Column Name	Data type & Data size	Description
passenger_id	Varchar2(15)	passenger id must be unique and not null
passenger_name	Varchar2(15)	passenger name should be not null
passenger_email	Varchar2(15)	passenger email should be not null
Passenger_dob	date	passenger dob should be not null

```
mysql> use fms ;
Database changed
mysql> create table Passenger( passenger_id varchar(15) NOT NULL UNIQUE , passenger_name varchar(15) NOT NULL ,
-> passenger_email varchar(15) NOT NULL , passenger_dob DATE NOT NULL);
Query OK, 0 rows affected (0.27 sec)

mysql> desc Passenger ;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| passenger_id   | varchar(15)   | NO   | PRI | NULL    |       |
| passenger_name | varchar(15)   | NO   |     | NULL    |       |
| passenger_email | varchar(15)   | NO   |     | NULL    |       |
| passenger_dob  | date          | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.06 sec)

mysql> _
```

Sample Data:

passenger_id	passenger_name	Passenger_email	Passenger_dob
P0001	Ram	Ram@gmail.com	01-dec-80
P0002	Rajan	Rajan@gmail.com	11-nov-39
P0003	Smita	Smita@gmail.com	06-feb-88
P0004	Bhavan	Bhavan@gmail.com	18-sep-73
P0005	Sheela	Sheela@gmail.com	09-may-76
P0006	Nethra	Nethra@gmail.com	08-oct-55

```
mysql> select * from passenger ;
+-----+-----+-----+-----+
| passenger_id | passenger_name | passenger_email | passenger_dob |
+-----+-----+-----+-----+
| P0001        | Ram            | Ram@gmail.com   | 1980-12-01    |
| P0002        | Rajan          | Rajan@gmail.com | 2039-11-11    |
| P0003        | Smita          | Smita@gmail.com | 1988-02-06    |
| P0004        | Bhavan         | Bhavn@gmail.com | 1973-09-18    |
| P0005        | Sheela         | Shela@gmail.com | 1976-05-09    |
| P0006        | Nethra         | Netha@gmail.com | 2008-10-08    |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

The Flight table contains information about flight.

Flight(flightid, flightsource, status)

Column Name	Data type & Data size	Description
flightid	Varchar2(15)	flightid must be unique and not null
flightsource	Varchar2(15)	flightsource should be not null
flightdest	Varchar2(15)	flightdest should be not null
flightdate	Varchar2(15)	Flightdate should be not null
flightseat	Varchar2(15)	Flightseat should be not null
ticketcost	Varchar2(15)	Ticketcost should be not null

```
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use n
mysql> create table flight( flightid varchar(15) unique not null , flighsource varchar(20) not null ,
-> flightdest varchar(20) not null , flightdate date not null , flightseat varchar(15) not null ,
-> ticketcost varchar(15) not null ) ;
Query OK, 0 rows affected (1.03 sec)

mysql> desc flight;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| flightid   | varchar(15)   | NO   | PRI | NULL    |       |
| flighsource| varchar(20)   | NO   |     | NULL    |       |
| flightdest | varchar(20)   | NO   |     | NULL    |       |
| flightdate | date          | NO   |     | NULL    |       |
| flightseat | varchar(15)   | NO   |     | NULL    |       |
| ticketcost | varchar(15)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.11 sec)

mysql>
```

Sample Data:

flightid	flightsource	flightdest	flightdate	flightseat	ticketcost
----------	--------------	------------	------------	------------	------------

F0001	Kolkatta	Hyderabad	01-dec-12	100	2000
F0002	Chennai	Hyderabad	02-dec-12	100	3000
F0003	Pune	Kolkatta	02-dec-12	100	2500
F0004	Bangalore	Pune	18-nov-12	100	2300
F0005	Hyderabad	Bangalore	09-apr-12	100	2600
F0006	Pune	Hyderabad	08-aug-12	100	3500
F0007	Pune	Kolkatta	04-dec-12	100	2900
F0008	Kolkatta	Hyderabad	06-dec-12	100	3500

```
mysql> insert into flight(flightid , flighsource , flightdest , flightdate , flightseat , ticketcost)
-> values('F0008' , 'Kolkata' , 'Hyderabad' , '12-12-06' , '100' , '3500') ;
Query OK, 1 row affected (0.46 sec)

mysql> select * from flight ;
+-----+-----+-----+-----+-----+-----+
| flightid | flighsource | flightdest | flightdate | flightseat | ticketcost |
+-----+-----+-----+-----+-----+-----+
| F0001   | Kolkata    | Hyderabad | 2012-12-01 | 100        | 2000       |
| F0002   | Chennai   | Hyderabad | 2012-12-02 | 100        | 3000       |
| F0003   | Banglore  | Pune      | 2012-12-01 | 100        | 2500       |
| F0004   | Pune      | Kolkata   | 2012-11-18 | 100        | 2300       |
| F0005   | Hyderabad | Banglore  | 2012-04-09 | 100        | 2600       |
| F0006   | Pune      | Kolkata   | 2012-12-04 | 100        | 2900       |
| F0007   | Pune      | Hyderabad | 2012-12-04 | 100        | 2900       |
| F0008   | Kolkata    | Hyderabad | 2012-12-06 | 100        | 3500       |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

The Booking table contains booking information of the flight.

Booking (booking\_id, flight\_id,bookdate)

Column Name	Data type & Data size	Description
booking_id	Varchar(15)	booking_id must be unique and not null
flight_id	Varchar2(15)	Must be an existing flights

bookdate	number(15)	bookdate should be not null
----------	------------	-----------------------------

```
mysql> desc booking ;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| booking_id | varchar(15)   | NO   | PRI | NULL    |       |
| flight_id  | varchar(15)   | YES  | MUL | NULL    |       |
| bookdate   | date          | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> █
```

Sample Data:

booking_id	flight_id	bookdate
B0001	F0001	01-dec-12
B0002	F0004	02-dec-12
B0003	F0005	03-dec-12
B0004	F0003	04-dec-12
B0005	F0001	02-dec-12
B0006	F0004	02-dec-12
B0007	F0003	02-dec-16

```
mysql> select * from booking ;
+-----+-----+-----+
| booking_id | flight_id | bookdate |
+-----+-----+-----+
| B0001      | F0001     | 2012-12-01 |
| B0002      | F0004     | 2012-12-02 |
| B0003      | F0005     | 2012-12-03 |
| B0004      | F0003     | 2012-12-04 |
| B0005      | F0001     | 2012-12-02 |
| B0006      | F0004     | 2012-12-02 |
| B0007      | F0003     | 2016-12-02 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

The Booking\_details table contains booking information of the passenger in the flight.

Column Name	Data type & Data size	Description
Booking_id	Varchar(15)	Must be an existing booking id
passenger _id	Varchar2(15)	Must be an existing passenger

```
mysql> desc booking_details ;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| booking_id     | varchar(15)   | YES  | MUL | NULL    |       |
| passenger_id   | varchar(15)   | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> _
```

Sample Data:

Booking_id	passenger_id
B0001	P0001
B0001	P0002
B0001	P0003
B0002	P0004
B0002	P0005
B0003	P0006
B0003	P0001
B0004	P0002
B0005	P0003

```
mysql> select * from booking_details ;
```

booking_id	passenger_id
B0001	P0001
B0001	P0002
B0001	P0003
B0002	P0004
B0002	P0005
B0003	P0006
B0003	P0001
B0004	P0002
B0005	P0003

9 rows in set (0.00 sec)

```
mysql> _
```

#### NOTE:

You are supposed to fill in the given records in Passenger, Flight, Booking and Booking\_details tables following these rules:

1. Identify the primary key and foreign key (if applicable) in each table.
2. Take care of the constraints and the relationships among the tables.

#### QUERIES



Query #1: Display passenger name who has a 'e' as second letter in their name.

```
mysql> select passenger_name from passenger where passenger_name like "_e%";
+-----+
| passenger_name |
+-----+
| Nethra         |
+-----+
1 row in set (0.04 sec)
```

Query #2: Display the name of the youngest passenger.

```
mysql> select passenger_name ,max( timestampdiff(year , passenger_dob , curdate())) from passenger ;
+-----+-----+
| passenger_name | max( timestampdiff(year , passenger_dob , curdate())) |
+-----+-----+
| Ram           | 48 |
+-----+-----+
1 row in set (0.05 sec)

mysql> _
```

Query #3: Display the number of flights leaving Kolkata.

```
mysql> select * from flight where flighsource = 'Kolkata' ;
+-----+-----+-----+-----+-----+-----+
| flightid | flighsource | flightdest | flightdate | flightseat | ticketcost |
+-----+-----+-----+-----+-----+-----+
| F0001    | Kolkata     | Hyderabad | 2012-12-01 | 100        | 2000       |
| F0008    | Kolkata     | Hyderabad | 2012-12-06 | 100        | 3500       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

Query #4: Display the passenger's name having more than 1 booking.

```
mysql> select passenger_name from passenger where passenger_id in (select passenger_id from booking_details group by booking_id having count(booking_id) > 1);
+-----+
| passenger_name |
+-----+
| Ram            |
| Bhavan         |
| Nethra         |
+-----+
3 rows in set (0.00 sec)
```

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