

Lab Assignment – Course Management System

Task-1:

1. Create the database named "Courier_Manage"

```
tanaygeet — mysql -u root -p — 89x30
[mysql> CREATE DATABASE Courier_Manage;
Query OK, 1 row affected (0.22 sec)

mysql> Show databases;
+-----+
| Database      |
+-----+
| Courier_Manage |
| information_schema |
| knapp          |
| mysql           |
| performance_schema |
| sys             |
| TechShop        |
+-----+
7 rows in set (0.02 sec)

mysql> USE Courier_Manage;
Database changed
mysql>
```

2. Define the schema for the tables:

- i) Create the User Table:

```
tanaygeet — mysql -u root -p — 89x30
[mysql> CREATE TABLE User (
    ->     UserID INT PRIMARY KEY AUTO_INCREMENT,
    ->     Name VARCHAR(255),
    ->     Email VARCHAR(255) UNIQUE,
    ->     Password VARCHAR(255),
    ->     ContactNumber VARCHAR(20),
    ->     Address TEXT);
Query OK, 0 rows affected (0.09 sec)

mysql> Show tables;
+-----+
| Tables_in_courier_manage |
+-----+
| User                      |
+-----+
1 row in set (0.00 sec)

mysql>
```

ii) Create the Courier table:

```
tanaygeet — mysql -u root -p — 89x30
mysql> CREATE TABLE Courier (
    ->     CourierID INT PRIMARY KEY AUTO_INCREMENT,
    ->     SenderName VARCHAR(255),
    ->     SenderAddress TEXT,
    ->     ReceiverName VARCHAR(255),
    ->     ReceiverAddress TEXT,
    ->     Weight DECIMAL(5, 2),
    ->     Status VARCHAR(50),
    ->     TrackingNumber VARCHAR(20) UNIQUE,
    ->     DeliveryDate DATE);
[ Query OK, 0 rows affected (0.02 sec)

mysql> Show tables;
+-----+
| Tables_in_courier_manage |
+-----+
| Courier          |
| User             |
+-----+
2 rows in set (0.00 sec)

mysql> ]
```

iii) Create the CourierServices table:

```
tanaygeet — mysql -u root -p — 89x30
mysql> CREATE TABLE CourierServices (
    ->     ServiceID INT PRIMARY KEY AUTO_INCREMENT,
    ->     ServiceName VARCHAR(100),
    ->     Cost DECIMAL(8, 2));
[ Query OK, 0 rows affected (0.02 sec)

mysql> Show tables;
+-----+
| Tables_in_courier_manage |
+-----+
| Courier          |
| CourierServices |
| User             |
+-----+
3 rows in set (0.00 sec)

mysql> ]
```

iv) Create the Employee table:

```
tanaygeet — mysql -u root -p — 89x30

mysql> CREATE TABLE Employee (
    ->     EmployeeID INT PRIMARY KEY AUTO_INCREMENT,
    ->     Name VARCHAR(255),
    ->     Email VARCHAR(255) UNIQUE,
    ->     ContactNumber VARCHAR(20),
    ->     Role VARCHAR(50),
    ->     Salary DECIMAL(10, 2));
[      ] Query OK, 0 rows affected (0.02 sec)

[mysql> Show tables;
+-----+
| Tables_in_courier_manage |
+-----+
| Courier           |
| CourierServices   |
| Employee          |
| User              |
+-----+
4 rows in set (0.00 sec)

mysql> ]
```

v) Create the Location table:

```
tanaygeet — mysql -u root -p — 89x30

mysql> CREATE TABLE Location (
    ->     LocationID INT PRIMARY KEY AUTO_INCREMENT,
    ->     LocationName VARCHAR(100),
    ->     Address TEXT);
[      ] Query OK, 0 rows affected (0.02 sec)

[mysql> Show tables;
+-----+
| Tables_in_courier_manage |
+-----+
| Courier           |
| CourierServices   |
| Employee          |
| Location          |
| User              |
+-----+
5 rows in set (0.00 sec)

mysql> ]
```

vi) Create the Payment table:

```
tanaygeet — mysql -u root -p — 89x30
mysql> CREATE TABLE Payment (
    ->     PaymentID INT PRIMARY KEY AUTO_INCREMENT,
    ->     CourierID INT,
    ->     LocationID INT,
    ->     Amount DECIMAL(10, 2),
    ->     PaymentDate DATE,
    ->     FOREIGN KEY (CourierID) REFERENCES Courier(CourierID),
    ->     FOREIGN KEY (LocationID) REFERENCES Location(LocationID));
[ Query OK, 0 rows affected (0.05 sec)

mysql> Show tables;
+-----+
| Tables_in_courier_manage |
+-----+
| Courier          |
| CourierServices |
| Employee         |
| Location         |
| Payment          |
| User             |
+-----+
6 rows in set (0.00 sec)

mysql>
```

3. Insert sample data into the tables:

i) Insert data into the User table:

```
tanaygeet — mysql -u root -p — 101x31
mysql> INSERT INTO User (Name, Email, Password, ContactNumber, Address)
-> VALUES
-> ('Tanaygeet Shrivastava', 'Tanaygeet@example.com', 'tanay123', '1234567890', 'Indore'),
-> ('Aditya Khamare', 'Aditya@example.com', 'aditya123', '0987654321', 'Pune'),
-> ('Latashree Shrivastava', 'Latashree@example.com', 'Lata123', '0987654321', 'Delhi'),
-> ('Ravindra Bage', 'Ravindra@example.com', 'Ravindra123', '0987654321', 'Lucknow'),
-> ('Kritika Sinha', 'Kritika@example.com', 'Kritika123', '0987654321', 'Irvine'),
-> ('Sonia Tiwari', 'Sonia@example.com', 'Sonia123', '0987654321', 'Mumbai'),
-> ('Shruti Parmar', 'Shruti@example.com', 'Shruti123', '0987654321', 'Bangalore'),
-> ('Dev Suri', 'Dev@example.com', 'Dev123', '0987654321', 'Hyderabad'),
-> ('Anush Jain', 'Anusha@example.com', 'Anush123', '0987654321', 'Udaipur'),
-> ('Dhairya Jain', 'Dhairya@example.com', 'Dhairya123', '0987654321', 'Chennai');
Query OK, 10 rows affected (0.06 sec)
Records: 10  Duplicates: 0  Warnings: 0
[ mysql> select * from User;
+-----+
| UserID | Name           | Email        | Password      | ContactNumber | Address      |
+-----+
| 1 | Tanaygeet Shrivastava | Tanaygeet@example.com | tanay123 | 1234567890 | Indore |
| 2 | Aditya Khamare       | Aditya@example.com   | aditya123 | 0987654321 | Pune  |
| 3 | Latashree Shrivastava | Latashree@example.com | Lata123 | 0987654321 | Delhi |
| 4 | Ravindra Bage        | Ravindra@example.com | Ravindra123 | 0987654321 | Lucknow |
| 5 | Kritika Sinha        | Kritika@example.com  | Kritika123 | 0987654321 | Irvine |
| 6 | Sonia Tiwari         | Sonia@example.com    | Sonia123 | 0987654321 | Mumbai |
| 7 | Shruti Parmar         | Shruti@example.com   | Shruti123 | 0987654321 | Bangalore |
| 8 | Dev Suri              | Dev@example.com      | Dev123 | 0987654321 | Hyderabad |
| 9 | Anush Jain            | Anusha@example.com   | Anush123 | 0987654321 | Udaipur |
| 10 | Dhairya Jain          | Dhairya@example.com  | Dhairya123 | 0987654321 | Chennai |
+-----+
10 rows in set (0.01 sec)
```

ii) Insert data into the Courier table:

```

mysql> INSERT INTO Courier (SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, DeliveryDate)
-> VALUES
-> ('Tanaygeet Shrivastava', 'Indore', 'Aditya Khamare', 'Pune', 5.5, 'In Transit', 'TRK123456', '2023-09-23'),
-> ('Aditya Khamare', 'Pune', 'Tanaygeet Shrivastava', 'Indore', 3.0, 'Delivered', 'TRK654321', '2023-09-20'),
-> ('Latashree Shrivastava', 'Delhi', 'Ravindra Bage', 'Lucknow', 7.4, 'In Transit', 'TRK456745', '2023-09-22'),
-> ('Ravindra Bage', 'Lucknow', 'Latashree Shrivastava', 'Delhi', 6.3, 'Delivered', 'TRK534735', '2023-09-19'),
-> ('Kritika Sinha', 'Irvine', 'Soniya Tiwari', 'Mumbai', 9.3, 'Delivered', 'TRK984274', '2023-09-21'),
-> ('Soniya Tiwari', 'Mumbai', 'Kritika Sinha', 'Irvine', 3.8, 'Delivered', 'TRK847263', '2023-09-18'),
-> ('Shruti Parmar', 'Bangalore', 'Dev Suri', 'Hyderabad', 8.1, 'In Transit', 'TRK204844', '2023-09-15'),
-> ('Dev Suri', 'Hyderabad', 'Shruti Parmar', 'Bangalore', 4.5, 'Delivered', 'TRK937541', '2023-09-07'),
-> ('Anush Jain', 'Udaipur', 'Dhairya Jain', 'Chennai', 1.9, 'Delivered', 'TRK542764', '2023-09-02'),
-> ('Dhairya Jain', 'Chennai', 'Anush Jain', 'Udaipur', 2.7, 'In Transit', 'TRK431235', '2023-09-12');
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql> select * from Courier;
+-----+-----+-----+-----+-----+-----+-----+-----+
| CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight | Status | TrackingNumber | DeliveryDate |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Tanaygeet Shrivastava | Indore | Aditya Khamare | Pune | 5.50 | In Transit | TRK123456 | 2023-09-23 |
| 2 | Aditya Khamare | Pune | Tanaygeet Shrivastava | Indore | 3.00 | Delivered | TRK654321 | 2023-09-20 |
| 3 | Latashree Shrivastava | Delhi | Ravindra Bage | Lucknow | 7.40 | In Transit | TRK456745 | 2023-09-22 |
| 4 | Ravindra Bage | Lucknow | Latashree Shrivastava | Delhi | 6.30 | In Transit | TRK534735 | 2023-09-19 |
| 5 | Kritika Sinha | Irvine | Soniya Tiwari | Mumbai | 9.30 | Delivered | TRK984274 | 2023-09-21 |
| 6 | Soniya Tiwari | Mumbai | Kritika Sinha | Irvine | 3.80 | Delivered | TRK847263 | 2023-09-18 |
| 7 | Shruti Parmar | Bangalore | Dev Suri | Hyderabad | 8.10 | In Transit | TRK204844 | 2023-09-15 |
| 8 | Dev Suri | Hyderabad | Shruti Parmar | Bangalore | 4.50 | Delivered | TRK937541 | 2023-09-07 |
| 9 | Anush Jain | Udaipur | Dhairya Jain | Chennai | 1.90 | Delivered | TRK542764 | 2023-09-02 |
| 10 | Dhairya Jain | Chennai | Anush Jain | Udaipur | 2.70 | In Transit | TRK431235 | 2023-09-12 |
+-----+-----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql>

```

iii) Insert data into the CourierServices table:

```

mysql> INSERT INTO CourierServices (ServiceName, Cost)
-> VALUES
-> ('Standard Delivery', 50.00),
-> ('Express Delivery', 100.00),
-> ('Same-Day Delivery', 150.00),
-> ('Overnight Delivery', 120.00),
-> ('International Delivery', 200.00),
-> ('Economy Delivery', 40.00),
-> ('Priority Delivery', 90.00),
-> ('Bulk Delivery', 300.00),
-> ('Freight Delivery', 500.00),
-> ('Next-Morning Delivery', 130.00);
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql> select * from CourierServices;
+-----+-----+-----+
| ServiceID | ServiceName | Cost |
+-----+-----+-----+
| 1 | Standard Delivery | 50.00 |
| 2 | Express Delivery | 100.00 |
| 3 | Same-Day Delivery | 150.00 |
| 4 | Overnight Delivery | 120.00 |
| 5 | International Delivery | 200.00 |
| 6 | Economy Delivery | 40.00 |
| 7 | Priority Delivery | 90.00 |
| 8 | Bulk Delivery | 300.00 |
| 9 | Freight Delivery | 500.00 |
| 10 | Next-Morning Delivery | 130.00 |
+-----+-----+-----+
10 rows in set (0.00 sec)

```

iv) Insert data into the Employee table:

```
tanaygeet — mysql -u root -p — 97x32
mysql> INSERT INTO Employee (Name, Email, ContactNumber, Role, Salary)
-> VALUES
-> ('Pallavi', 'Pallavi@company.com', '9122334455', 'Manager', 50000.00),
-> ('Ronak', 'Ronak@company.com', '8566778899', 'Courier', 30000.00),
-> ('Yogesh', 'Yogesh@company.com', '9233445566', 'Warehouse Staff', 25000.00),
-> ('Harsh', 'Harsh@company.com', '7344556677', 'HR', 45000.00),
-> ('Anand', 'Anand@company.com', '6455667788', 'Courier', 32000.00),
-> ('Luv', 'Luv@company.com', '9345678972', 'Customer Support', 28000.00),
-> ('Akshita', 'Akshita@company.com', '6677889900', 'Logistics Manager', 60000.00),
-> ('Rishab', 'Rishab@company.com', '7788990011', 'Driver', 27000.00),
-> ('Akshat', 'Akshat@company.com', '8899001122', 'IT Support', 35000.00),
-> ('Ashutosh', 'Ashutosh@company.com', '9900112233', 'Operations Manager', 55000.00);
Query OK, 10 rows affected (0.02 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql> select * from Employee;
+-----+-----+-----+-----+-----+-----+
| EmployeeID | Name      | Email        | ContactNumber | Role       | Salary     |
+-----+-----+-----+-----+-----+-----+
| 1 | Pallavi   | Pallavi@company.com | 9122334455 | Manager    | 50000.00  |
| 2 | Ronak     | Ronak@company.com | 8566778899 | Courier    | 30000.00  |
| 3 | Yogesh    | Yogesh@company.com | 9233445566 | Warehouse Staff | 25000.00  |
| 4 | Harsh     | Harsh@company.com | 7344556677 | HR         | 45000.00  |
| 5 | Anand     | Anand@company.com | 6455667788 | Courier    | 32000.00  |
| 6 | Luv        | Luv@company.com | 9345678972 | Customer Support | 28000.00  |
| 7 | Akshita   | Akshita@company.com | 6677889900 | Logistics Manager | 60000.00  |
| 8 | Rishab    | Rishab@company.com | 7788990011 | Driver     | 27000.00  |
| 9 | Akshat    | Akshat@company.com | 8899001122 | IT Support  | 35000.00  |
| 10 | Ashutosh  | Ashutosh@company.com | 9900112233 | Operations Manager | 55000.00  |
+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)
```

v) Insert data into the Location table:

```
tanaygeet — mysql -u root -p — 97x32
mysql> INSERT INTO Location (LocationName, Address)
-> VALUES
-> ('Main Warehouse', 'Saket, Indore'),
-> ('Branch Office', 'Magarpatta, Pune'),
-> ('Sorting Facility', 'Whitefield, Bangalore'),
-> ('Dispatch Center', 'Kormangala, Bangalore'),
-> ('International Hub', 'Hinjawadi, Pune'),
-> ('Customer Pickup Point', 'Gandhi Nagar, New Delhi'),
-> ('Delivery Office', 'Indiranagar, Hyderabad'),
-> ('Distribution Center', 'Rajiv Circle, Lucknow'),
-> ('Logistics Center', 'City Hall, Mumbai'),
-> ('Remote Hub', 'Church Street, Chennai');
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql> select * from Location;
+-----+-----+-----+
| LocationID | LocationName | Address      |
+-----+-----+-----+
| 1 | Main Warehouse | Saket, Indore |
| 2 | Branch Office | Magarpatta, Pune |
| 3 | Sorting Facility | Whitefield, Bangalore |
| 4 | Dispatch Center | Kormangala, Bangalore |
| 5 | International Hub | Hinjawadi, Pune |
| 6 | Customer Pickup Point | Gandhi Nagar, New Delhi |
| 7 | Delivery Office | Indiranagar, Hyderabad |
| 8 | Distribution Center | Rajiv Circle, Lucknow |
| 9 | Logistics Center | City Hall, Mumbai |
| 10 | Remote Hub | Church Street, Chennai |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

vi) Insert data into the Location table:

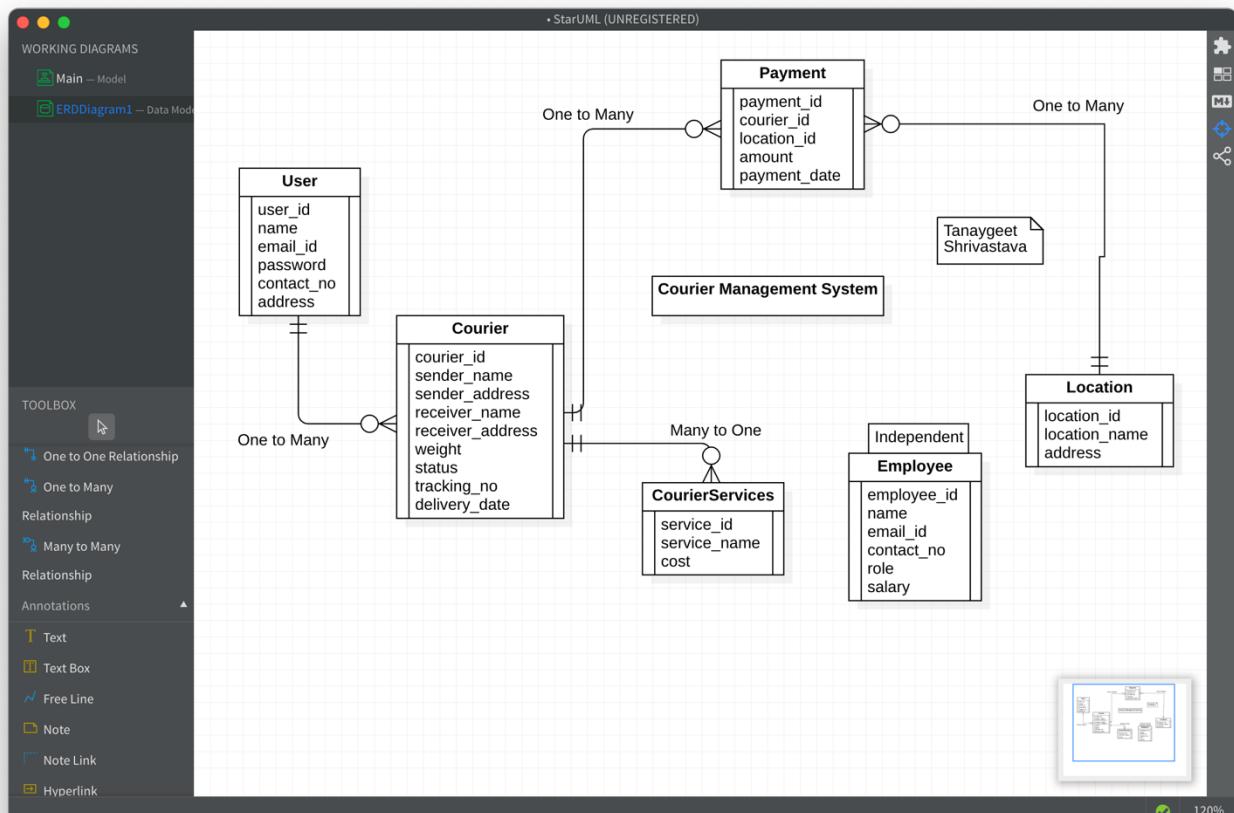
```

tanaygeet — mysql -u root -p — 97x32
mysql> INSERT INTO Payment (CourierID, LocationID, Amount, PaymentDate)
-> VALUES
-> (1, 1, 55.00, '2023-09-23'),
-> (2, 2, 105.00, '2023-09-20'),
-> (3, 3, 120.00, '2023-09-22'),
-> (4, 4, 95.00, '2023-09-19'),
-> (5, 5, 60.00, '2023-09-21'),
-> (6, 6, 110.00, '2023-09-18'),
-> (7, 7, 80.00, '2023-09-15'),
-> (8, 8, 115.00, '2023-09-08'),
-> (9, 9, 70.00, '2023-09-12'),
-> (10, 10, 130.00, '2023-09-04');
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0

[mysql> select * from Payment;
+-----+-----+-----+-----+-----+
| PaymentID | CourierID | LocationID | Amount | PaymentDate |
+-----+-----+-----+-----+-----+
| 1 | 1 | 1 | 55.00 | 2023-09-23 |
| 2 | 2 | 2 | 105.00 | 2023-09-20 |
| 3 | 3 | 3 | 120.00 | 2023-09-22 |
| 4 | 4 | 4 | 95.00 | 2023-09-19 |
| 5 | 5 | 5 | 60.00 | 2023-09-21 |
| 6 | 6 | 6 | 110.00 | 2023-09-18 |
| 7 | 7 | 7 | 80.00 | 2023-09-15 |
| 8 | 8 | 8 | 115.00 | 2023-09-08 |
| 9 | 9 | 9 | 70.00 | 2023-09-12 |
| 10 | 10 | 10 | 130.00 | 2023-09-04 |
+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

```

4. ER Diagram:



Task-2:

Solve the following queries in the Schema that you have created above.

- ## 1. List all customers:

```
tanaygeet — mysql -u root -p — 104x26

mysql> select * from User;
+-----+-----+-----+-----+-----+-----+
| UserID | Name           | Email          | Password        | ContactNumber | Address        |
+-----+-----+-----+-----+-----+-----+
| 1     | Tanaygeet Shrivastava | Tanaygeet@example.com | tanay123       | 1234567890   | Indore         |
| 2     | Aditya Khamare      | Aditya@example.com  | aditya123     | 0987654321   | Pune           |
| 3     | Latashree Shrivastava | Latashree@example.com | Lata123       | 0987654321   | Delhi          |
| 4     | Ravindra Bage        | Ravindra@example.com | Ravindra123  | 0987654321   | Lucknow        |
| 5     | Kritika Sinha        | Kritika@example.com | Kritika123   | 0987654321   | Irvine          |
| 6     | Soniya Tiwari        | Soniya@example.com  | Soniya123    | 0987654321   | Mumbai          |
| 7     | Shruti Parmar         | Shruti@example.com  | Shruti123    | 0987654321   | Bangalore      |
| 8     | Dev Suri             | Dev@example.com    | Dev123        | 0987654321   | Hyderabad      |
| 9     | Anush Jain            | Anusha@example.com | Anush123     | 0987654321   | Udaipur         |
| 10    | Dhairya jain          | Dhairya@example.com | Dhairya123   | 0987654321   | Chennai         |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.02 sec)

mysql>
```

2. List all orders for a specific customer:

3. List all couriers:

4. List all packages for a specific order:

5. List all deliveries for a specific courier:

6. List all undelivered packages:

7. List all packages that are scheduled for delivery today:

8. List all packages with a specific status:

9. Calculate the total number of packages for each courier.

```
tanaygeet — mysql -u root -p — 56x25

mysql> SELECT CourierID, COUNT(*) AS TotalPackages
-> FROM Courier
-> GROUP BY CourierID;
+-----+
| CourierID | TotalPackages |
+-----+
|      1    |          1 |
|      2    |          1 |
|      3    |          1 |
|      4    |          1 |
|      5    |          1 |
|      6    |          1 |
|      7    |          1 |
|      8    |          1 |
|      9    |          1 |
|     10    |          1 |
+-----+
10 rows in set (0.01 sec)

mysql>
```

10. Find the average delivery time for each courier.

```
tanaygeet — mysql -u root -p — 85x24

mysql> SELECT CourierID, AVG(DATEDIFF(DeliveryDate, CreatedDate)) AS AvgDeliveryTime
-> FROM Courier
-> GROUP BY CourierID;
+-----+
| CourierID | AvgDeliveryTime |
+-----+
|      1    |      3.0000 |
|      2    |     39.0000 |
|      3    |     12.0000 |
|      4    |     -3.0000 |
|      5    |    375.0000 |
|      6    |      0.0000 |
|      7    |     39.0000 |
|      8    |      3.0000 |
|      9    |    -21.0000 |
|     10    |      0.0000 |
+-----+
10 rows in set (0.01 sec)

mysql>
```

11. List all packages with a specific weight range:

```
tanaygeet — mysql -u root -p — 172x24
mysql> SELECT * FROM Courier
-> WHERE Weight BETWEEN 3.0 AND 6.0;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight | Status | TrackingNumber | DeliveryDate | UserID | CreatedDate |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Tanaygeet Shrivastava | Indore | Aditya Khamare | Pune | 5.50 | In Transit | TRK123456 | 2023-09-23 | 1 | 2023-09-20 |
| 2 | Aditya Khamare | Pune | Tanaygeet Shrivastava | Indore | 3.00 | Delivered | TRK654321 | 2023-09-20 | 2 | 2023-08-12 |
| 6 | Soniya Tiwari | Mumbai | Kritika Sinha | Irvine | 3.80 | Delivered | TRK847263 | 2023-09-18 | 6 | 2023-09-18 |
| 8 | Dev Suri | Hyderabad | Shruti Parmar | Bangalore | 4.50 | Delivered | TRK937541 | 2023-09-07 | 8 | 2023-09-04 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)

mysql> █
```

12. Retrieve employees whose names contain 'Pallavi'

```
tanaygeet — mysql -u root -p — 86x20
mysql> SELECT * FROM Employee
-> WHERE Name LIKE '%Pallavi%';
+-----+-----+-----+-----+-----+-----+
| EmployeeID | Name | Email | ContactNumber | Role | Salary |
+-----+-----+-----+-----+-----+-----+
| 1 | Pallavi | Pallavi@company.com | 9122334455 | Manager | 50000.00 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

mysql> █
```

13. Retrieve all courier records with payments greater than \$50.

Task-3:

14. Find the total number of couriers handled by each employee.

```
tanaygeet — mysql -u root -p — 71x23
mysql> SELECT EmployeeID, COUNT(*) AS TotalCouriers
    -> FROM Courier
    -> GROUP BY EmployeeID;
+-----+-----+
| EmployeeID | TotalCouriers |
+-----+-----+
|      NULL  |          10 |
+-----+-----+
1 row in set (0.04 sec)

mysql>
```

15. Calculate the total revenue generated by each location.

```
tanaygeet — mysql -u root -p — 71x23
mysql> SELECT LocationID, SUM(Amount) AS TotalRevenue
    -> FROM Payment
    -> GROUP BY LocationID;
+-----+-----+
| LocationID | TotalRevenue |
+-----+-----+
|         1   |      55.00 |
|         2   |     105.00 |
|         3   |     120.00 |
|         4   |      95.00 |
|         5   |      60.00 |
|         6   |     110.00 |
|         7   |      80.00 |
|         8   |     115.00 |
|         9   |      70.00 |
|        10  |     130.00 |
+-----+-----+
10 rows in set (0.03 sec)

mysql>
```

16. Find the total number of couriers delivered to each location.

```
tanaygeet — mysql -u root -p — 71x23
mysql> SELECT LocationID, COUNT(*) AS TotalCouriers
    -> FROM Courier
    -> WHERE Status = 'Delivered'
[   -> GROUP BY LocationID;
+-----+-----+
| LocationID | TotalCouriers |
+-----+-----+
|      NULL  |          5 |
+-----+-----+
1 row in set (0.01 sec)

mysql> ]
```

17. Find the courier with the highest average delivery time:

```
tanaygeet — mysql -u root -p — 88x22
mysql> SELECT CourierID, AVG(DATEDIFF(DeliveryDate, CreatedDate)) AS AvgDeliveryTime
    -> FROM Courier
    -> GROUP BY CourierID
    -> ORDER BY AvgDeliveryTime DESC
    -> LIMIT 1;
+-----+-----+
| CourierID | AvgDeliveryTime |
+-----+-----+
|        5  |       375.0000 |
+-----+-----+
1 row in set (0.02 sec)

mysql> ]
```

18. Find Locations with Total Payments Less Than a Certain Amount

```
tanaygeet — mysql -u root -p — 88x22
mysql> SELECT LocationID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> GROUP BY LocationID
[ -> HAVING TotalPayments < 60;
+-----+
| LocationID | TotalPayments |
+-----+
|       1 |      55.00 |
+-----+
1 row in set (0.01 sec)

mysql>
```

19. Calculate Total Payments per Location

```
tanaygeet — mysql -u root -p — 88x22
mysql> SELECT LocationID, SUM(Amount) AS TotalPayments
-> FROM Payment
[ -> GROUP BY LocationID;
+-----+
| LocationID | TotalPayments |
+-----+
|       1 |      55.00 |
|       2 |     105.00 |
|       3 |     120.00 |
|       4 |      95.00 |
|       5 |      60.00 |
|       6 |     110.00 |
|       7 |      80.00 |
|       8 |     115.00 |
|       9 |      70.00 |
|      10 |     130.00 |
+-----+
10 rows in set (0.00 sec)

mysql>
```

20. Retrieve couriers who have received payments totalling more than \$1000 in a specific location (LocationID = X):

```
tanaygeet — mysql -u root -p — 88x22
mysql> SELECT CourierID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> WHERE LocationID = 4
-> GROUP BY CourierID
[   -> HAVING TotalPayments > 1000;
Empty set (0.05 sec)

mysql> SELECT CourierID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> WHERE LocationID = 4
-> GROUP BY CourierID
[   -> HAVING TotalPayments > 80;
+-----+-----+
| CourierID | TotalPayments |
+-----+-----+
|        4 |         95.00 |
+-----+-----+
1 row in set (0.00 sec)

mysql>
```

21. Retrieve couriers who have received payments totalling more than \$1000 after a certain date (PaymentDate > 'YYYY-MM-DD'):

```
tanaygeet — mysql -u root -p — 88x22
mysql> SELECT CourierID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> WHERE PaymentDate > '2023-09-22'
-> GROUP BY CourierID
[   -> HAVING TotalPayments > 1000;
Empty set (0.00 sec)

mysql> SELECT CourierID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> WHERE PaymentDate > '2023-09-22'
-> GROUP BY CourierID
[   -> HAVING TotalPayments > 50;
+-----+-----+
| CourierID | TotalPayments |
+-----+-----+
|        1 |         55.00 |
+-----+-----+
1 row in set (0.01 sec)

mysql>
```

22. Retrieve locations where the total amount received is more than \$5000 before a certain date (PaymentDate > 'YYYY-MM-DD')

```
tanaygeet — mysql -u root -p — 88x22
mysql> SELECT LocationID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> WHERE PaymentDate < '2023-09-15'
-> GROUP BY LocationID
[   -> HAVING TotalPayments > 5000;
Empty set (0.05 sec)

mysql> SELECT LocationID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> WHERE PaymentDate < '2023-09-15'
-> GROUP BY LocationID
[   -> HAVING TotalPayments > 70;
+-----+-----+
| LocationID | TotalPayments |
+-----+-----+
|        8 |      115.00 |
|       10 |      130.00 |
+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Task-4:

23. Retrieve Payments with Courier Information.

```
tanaygeet — mysql -u root -p — 139x34
mysql> SELECT p.PaymentID, p.Amount, p.PaymentDate, c.*
    -> FROM Payment p
    -> JOIN Courier c ON p.CourierID = c.CourierID;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| PaymentID | Amount | PaymentDate | CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight |
| Status     | TrackingNumber | DeliveryDate | UserID | CreatedDate | EmployeeID | LocationID |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 55.00 | 2023-09-23 | 1 | Tanaygeet Shrivastava | Indore | Aditya Khamare | Pune | 5.50 | | | |
| In Transit | TRK123456 | 2023-09-23 | 1 | 2023-09-20 | 1 | 1 | Tanaygeet Shrivastava | Indore | 3.00 |
| 2 | 105.00 | 2023-09-20 | 2 | Aditya Khamare | Pune | Tanaygeet Shrivastava | Indore | 3.00 |
| Delivered | TRK654321 | 2023-09-20 | 2 | 2023-08-12 | 1 | 2 | Ravindra Bage | Lucknow | 7.40 |
| 3 | 120.00 | 2023-09-22 | 3 | Latashree Shrivastava | Delhi | 3 | Ravindra Bage | Lucknow | 6.30 |
| In Transit | TRK456745 | 2023-09-22 | 3 | 2023-09-10 | 1 | 3 | Latashree Shrivastava | Delhi | 9.30 |
| 4 | 95.00 | 2023-09-19 | 4 | Ravindra Bage | Lucknow | 4 | Latashree Shrivastava | Delhi | 4.50 |
| In Transit | TRK534735 | 2023-09-19 | 4 | 2023-09-22 | 1 | 4 | Kritika Sinha | Irvine | Mumbai | 2.70 |
| 5 | 60.00 | 2023-09-21 | 5 | Kritika Sinha | Irvine | Sonia Tiwari | Mumbai | 3.80 |
| Delivered | TRK984274 | 2024-09-24 | 5 | 2023-09-15 | 1 | 5 | Sonia Tiwari | Mumbai | Kritika Sinha | Irvine | 8.10 |
| 6 | 110.00 | 2023-09-18 | 6 | Sonia Tiwari | Mumbai | 6 | Dev Suri | Hyderabad | 1.90 |
| Delivered | TRK847263 | 2023-09-18 | 6 | 2023-09-18 | 1 | 6 | Shruti Parmar | Bangalore | Shruti Parmar | Bangalore | 4.50 |
| 7 | 80.00 | 2023-09-15 | 7 | Shruti Parmar | Bangalore | 7 | Dev Suri | Hyderabad | 2.70 |
| In Transit | TRK204844 | 2023-09-15 | 7 | 2023-08-07 | 1 | 7 | Anush Jain | Udaipur | Dhairya Jain | Chennai | 3.00 |
| 8 | 115.00 | 2023-09-08 | 8 | Dev Suri | Hyderabad | 8 | Anush Jain | Udaipur | Dhairya Jain | Chennai | 5.50 |
| Delivered | TRK937541 | 2023-09-07 | 8 | 2023-09-04 | 1 | 8 | Udaipur | Dhairya Jain | Chennai | Udaipur | 7.40 |
| 9 | 70.00 | 2023-09-12 | 9 | Anush Jain | Udaipur | 9 | Dhairya Jain | Chennai | Udaipur | 2.70 |
| Delivered | TRK542764 | 2023-09-02 | 9 | 2023-09-23 | 1 | 9 | Chennai | Anush Jain | Udaipur | 3.80 |
| 10 | 130.00 | 2023-09-04 | 10 | Dhairya Jain | Chennai | 10 | Remote Hub | Church Street, Chennai | 10 | 10 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.07 sec)

mysql> █
```

24. Retrieve Payments with Location Information.

```
tanaygeet — mysql -u root -p — 100x34
mysql> SELECT p.PaymentID, p.Amount, p.PaymentDate, l.*
    -> FROM Payment p
    -> JOIN Location l ON p.LocationID = l.LocationID;
+-----+-----+-----+-----+-----+-----+
| PaymentID | Amount | PaymentDate | LocationID | LocationName | Address |
+-----+-----+-----+-----+-----+-----+
| 1 | 55.00 | 2023-09-23 | 1 | Main Warehouse | Saket, Indore |
| 2 | 105.00 | 2023-09-20 | 2 | Branch Office | Magarpatta, Pune |
| 3 | 120.00 | 2023-09-22 | 3 | Sorting Facility | Whitefield, Bangalore |
| 4 | 95.00 | 2023-09-19 | 4 | Dispatch Center | Kormangla, Bangalore |
| 5 | 60.00 | 2023-09-21 | 5 | International Hub | Hinjawadi, Pune |
| 6 | 110.00 | 2023-09-18 | 6 | Customer Pickup Point | Gandhi Nagar, New Delhi |
| 7 | 80.00 | 2023-09-15 | 7 | Delivery Office | Indiranagar, Hyderabad |
| 8 | 115.00 | 2023-09-08 | 8 | Distribution Center | Rajiv Circle, Lucknow |
| 9 | 70.00 | 2023-09-12 | 9 | Logistics Center | City Hall, Mumbai |
| 10 | 130.00 | 2023-09-04 | 10 | Remote Hub | Church Street, Chennai |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> █
```

25. Retrieve Payments with Courier and Location Information.

26. List all payments with courier details.

```
mysql> SELECT p.*, c.*  
    > FROM Payment p  
    > JOIN Courier c ON p.CourierID = c.CourierID;  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| PaymentID | CourierID | LocationID | Amount | PaymentDate | CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight | Status | TrackingNumber | DeliveryDate |  
| UserID | CreatedDate | EmployeeID | LocationID |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| 1 | 1 | 1 | 55.00 | 2023-09-23 | 1 | Tanaygeet Shrivastava | Indore | Aditya Khamare | Pune | 5.50 | In Transit | TRK123456 | 2023-09-23  
| 1 | 2023-09-28 | 1 | 1 |  
| 2 | 2 | 2 | 105.00 | 2023-09-20 | 2 | Aditya Khamare | Pune | Tanaygeet Shrivastava | Indore | 3.00 | Delivered | TRK654321 | 2023-09-20  
| 2 | 2023-08-12 | 1 | 2 |  
| 3 | 3 | 3 | 120.00 | 2023-09-22 | 3 | Latashree Shrivastava | Delhi | Ravindra Bage | Lucknow | 7.40 | In Transit | TRK456745 | 2023-09-22  
| 3 | 2023-09-18 | 1 | 3 |  
| 4 | 4 | 4 | 95.00 | 2023-09-19 | 4 | Ravindra Bage | Lucknow | Latashree Shrivastava | Delhi | 6.30 | In Transit | TRK534735 | 2023-09-19  
| 4 | 2023-09-22 | 1 | 4 |  
| 5 | 5 | 5 | 60.00 | 2023-09-21 | 5 | Kritika Sinha | Irvine | Soniya Tiwari | Mumbai | 9.30 | Delivered | TRK984274 | 2024-09-24  
| 5 | 2023-09-15 | 1 | 5 |  
| 6 | 6 | 6 | 110.00 | 2023-09-18 | 6 | Soniya Tiwari | Mumbai | Kritika Sinha | Irvine | 3.80 | Delivered | TRK847263 | 2023-09-18  
| 6 | 2023-09-18 | 1 | 6 |  
| 7 | 7 | 7 | 80.00 | 2023-09-15 | 7 | Shruti Parmar | Bangalore | Dev Suri | Hyderabad | 8.10 | In Transit | TRK204844 | 2023-09-15  
| 7 | 2023-08-07 | 1 | 7 |  
| 8 | 8 | 8 | 115.00 | 2023-09-08 | 8 | Dev Suri | Hyderabad | Shruti Parmar | Bangalore | 4.50 | Delivered | TRK937541 | 2023-09-08  
| 8 | 2023-09-04 | 1 | 8 |  
| 9 | 9 | 9 | 70.00 | 2023-09-12 | 9 | Anush Jain | Udaipur | Dhairya Jain | Chennai | 1.90 | Delivered | TRK542764 | 2023-09-02  
| 9 | 2023-09-23 | 1 | 9 |  
| 10 | 10 | 10 | 130.00 | 2023-09-04 | 10 | Dhairya Jain | Chennai | Anush Jain | Udaipur | 2.70 | In Transit | TRK431235 | 2023-09-12  
| 10 | 2023-09-12 | 1 | 10 |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
10 rows in set (0.00 sec)  
  
mysql>
```

27. Total payments received for each courier.

```
tanaygeet — mysql -u root -p — 70x28
mysql> SELECT c.CourierID, SUM(p.Amount) AS TotalPayments
-> FROM Payment p
-> JOIN Courier c ON p.CourierID = c.CourierID
-> GROUP BY c.CourierID;
+-----+-----+
| CourierID | TotalPayments |
+-----+-----+
|      1 |      55.00 |
|      2 |     105.00 |
|      3 |     120.00 |
|      4 |      95.00 |
|      5 |      60.00 |
|      6 |     110.00 |
|      7 |      80.00 |
|      8 |     115.00 |
|      9 |      70.00 |
|     10 |    130.00 |
+-----+
10 rows in set (0.01 sec)

mysql> █
```

28. List payments made on a specific date.

```
tanaygeet — mysql -u root -p — 70x28
mysql> SELECT *
-> FROM Payment
[ -> WHERE PaymentDate = '2023-09-08';
+-----+-----+-----+-----+-----+
| PaymentID | CourierID | LocationID | Amount | PaymentDate |
+-----+-----+-----+-----+-----+
|      8 |       8 |        8 | 115.00 | 2023-09-08 |
+-----+-----+-----+-----+
1 row in set (0.01 sec)

mysql> █
```

29. Get Courier Information for Each Payment.

```
tanaygeet — mysql -u root -p — 195x37

mysql> SELECT p.PaymentID, c.*  
    -> FROM Payment p  
    -> JOIN Courier c ON p.CourierID = c.CourierID;  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| PaymentID | CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight | Status | TrackingNumber | DeliveryDate | UserID | CreatedDate | EmployeeID |  
| LocationID |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| 1 | 1 | Tanaygeet Shrivastava | Indore | Aditya Khamare | Pune | 5.50 | In Transit | TRK123456 | 2023-09-23 | 1 | 2023-09-20 | 1  
| 2 | 2 | Aditya Khamare | Pune | Tanaygeet Shrivastava | Indore | 3.00 | Delivered | TRK654321 | 2023-09-20 | 2 | 2023-08-12 | 1  
| 2 | 2 |  
| 3 | 3 | Latashree Shrivastava | Delhi | Ravindra Bage | Lucknow | 7.40 | In Transit | TRK456745 | 2023-09-22 | 3 | 2023-09-10 | 1  
| 3 | 3 |  
| 4 | 4 | Ravindra Bage | Lucknow | Latashree Shrivastava | Delhi | 6.30 | In Transit | TRK534735 | 2023-09-19 | 4 | 2023-09-22 | 1  
| 4 | 4 |  
| 5 | 5 | Kritika Sinha | Irvine | Soniya Tiwari | Mumbai | 9.30 | Delivered | TRK984274 | 2024-09-24 | 5 | 2023-09-15 | 1  
| 5 | 5 |  
| 6 | 6 | Soniya Tiwari | Mumbai | Kritika Sinha | Irvine | 3.80 | Delivered | TRK847263 | 2023-09-18 | 6 | 2023-09-18 | 1  
| 6 | 6 |  
| 7 | 7 | Shruti Parmar | Bangalore | Dev Suri | Hyderabad | 8.10 | In Transit | TRK204844 | 2023-09-15 | 7 | 2023-08-07 | 1  
| 7 | 7 |  
| 8 | 8 | Dev Suri | Hyderabad | Shruti Parmar | Bangalore | 4.50 | Delivered | TRK937541 | 2023-09-07 | 8 | 2023-09-04 | 1  
| 8 | 8 |  
| 9 | 9 | Anush Jain | Udaipur | Dhairya Jain | Chennai | 1.90 | Delivered | TRK542764 | 2023-09-02 | 9 | 2023-09-23 | 1  
| 9 | 9 |  
| 10 | 10 | Dhairya Jain | Chennai | Anush Jain | Udaipur | 2.70 | In Transit | TRK431235 | 2023-09-12 | 10 | 2023-09-12 | 1  
| 10 | 10 |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
10 rows in set (0.01 sec)  
mysql>
```

30. Get Payment Details with Location.

```
tanaygeet — mysql -u root -p — 126x24

mysql> SELECT p.*, l.*  
    -> FROM Payment p  
    -> JOIN Location l ON p.LocationID = l.LocationID;  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| PaymentID | CourierID | LocationID | Amount | PaymentDate | LocationID | LocationName | Address |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| 1 | 1 | 1 | 55.00 | 2023-09-23 | 1 | Main Warehouse | Saket, Indore |  
| 2 | 2 | 2 | 105.00 | 2023-09-20 | 2 | Branch Office | Magarpatta, Pune |  
| 3 | 3 | 3 | 120.00 | 2023-09-22 | 3 | Sorting Facility | Whitefield, Bangalore |  
| 4 | 4 | 4 | 95.00 | 2023-09-19 | 4 | Dispatch Center | Kormangla, Bangalore |  
| 5 | 5 | 5 | 60.00 | 2023-09-21 | 5 | International Hub | Hinjewadi, Pune |  
| 6 | 6 | 6 | 110.00 | 2023-09-18 | 6 | Customer Pickup Point | Gandhi Nagar, New Delhi |  
| 7 | 7 | 7 | 80.00 | 2023-09-15 | 7 | Delivery Office | Indiranagar, Hyderabad |  
| 8 | 8 | 8 | 115.00 | 2023-09-08 | 8 | Distribution Center | Rajiv Circle, Lucknow |  
| 9 | 9 | 9 | 70.00 | 2023-09-12 | 9 | Logistics Center | City Hall, Mumbai |  
| 10 | 10 | 10 | 130.00 | 2023-09-04 | 10 | Remote Hub | Church Street, Chennai |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
10 rows in set (0.00 sec)  
mysql>
```

31. Calculating Total Payments for Each Courier.

```
tanaygeet — mysql -u root -p — 56x24
mysql> SELECT CourierID, SUM(Amount) AS TotalPayments
-> FROM Payment
-> GROUP BY CourierID;
+-----+-----+
| CourierID | TotalPayments |
+-----+-----+
|      1 |      55.00 |
|      2 |     105.00 |
|      3 |     120.00 |
|      4 |      95.00 |
|      5 |      60.00 |
|      6 |     110.00 |
|      7 |      80.00 |
|      8 |     115.00 |
|      9 |      70.00 |
|     10 |     130.00 |
+-----+-----+
10 rows in set (0.00 sec)

mysql> █
```

32. List Payments Within a Date Range.

```
tanaygeet — mysql -u root -p — 69x18
mysql> SELECT *
-> FROM Payment
-> WHERE PaymentDate BETWEEN '2023-09-10' AND '2023-09-30';
+-----+-----+-----+-----+-----+
| PaymentID | CourierID | LocationID | Amount | PaymentDate |
+-----+-----+-----+-----+-----+
|      1 |      1 |      1 |  55.00 | 2023-09-23 |
|      2 |      2 |      2 | 105.00 | 2023-09-20 |
|      3 |      3 |      3 | 120.00 | 2023-09-22 |
|      4 |      4 |      4 |   95.00 | 2023-09-19 |
|      5 |      5 |      5 |   60.00 | 2023-09-21 |
|      6 |      6 |      6 | 110.00 | 2023-09-18 |
|      7 |      7 |      7 |   80.00 | 2023-09-15 |
|      9 |      9 |      9 |   70.00 | 2023-09-12 |
+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)

mysql> █
```

33. Retrieve a list of all users and their corresponding courier records, including cases where there are no matches on either side.

34. Retrieve a list of all couriers and their corresponding services, including cases where there are no matches on either side.

35. Retrieve a list of all employees and their corresponding payments, including cases where there are no matches on either side.

```
tanaygeet — mysql -u root -p — 100x26
mysql> select * from Employee;
+-----+-----+-----+-----+-----+-----+
| EmployeeID | Name | Email | ContactNumber | Role | Salary |
+-----+-----+-----+-----+-----+-----+
| 1 | Pallavi | Pallavi@company.com | 9122334455 | Manager | 50000.00 |
| 2 | Ronak | Ronak@company.com | 8566778899 | Courier | 30000.00 |
| 3 | Yogesh | Yogesh@company.com | 9233445566 | Warehouse Staff | 25000.00 |
| 4 | Harsh | Harsh@company.com | 7344556677 | HR | 45000.00 |
| 5 | Anand | Anand@company.com | 6455667788 | Courier | 32000.00 |
| 6 | Luv | Luv@company.com | 9345678972 | Customer Support | 28000.00 |
| 7 | Akshita | Akshita@company.com | 6677889900 | Logistics Manager | 60000.00 |
| 8 | Rishab | Rishab@company.com | 7788990011 | Driver | 27000.00 |
| 9 | Akshat | Akshat@company.com | 8899001122 | IT Support | 35000.00 |
| 10 | Ashutosh | Ashutosh@company.com | 9900112233 | Operations Manager | 55000.00 |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql>
```

36. List all users and all courier services, showing all possible combinations.

```
tanaygeet — mysql -u root -p — 164x54
mysql> SELECT u.* , s.*
    > FROM User u
    > CROSS JOIN CourierServices s;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| UserID | Name | Email | Password | ContactNumber | Address | ServiceID | ServiceName | Cost |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 10 | Dhairya jain | Dhairya@example.com | Dhairya123 | 0987654321 | Chennai | 1 | Standard Delivery | 50.00 |
| 9 | Anush Jain | Anusha@example.com | Anush123 | 0987654321 | Udaipur | 1 | Standard Delivery | 50.00 |
| 8 | Dev Suri | Dev@example.com | Dev123 | 0987654321 | Hyderabad | 1 | Standard Delivery | 50.00 |
| 7 | Shruti Parmar | Shruti@example.com | Shruti123 | 0987654321 | Bangalore | 1 | Standard Delivery | 50.00 |
| 6 | Soniya Tiwari | Soniya@example.com | Soniya123 | 0987654321 | Mumbai | 1 | Standard Delivery | 50.00 |
| 5 | Kritika Sinha | Kritika@example.com | Kritika123 | 0987654321 | Irvine | 1 | Standard Delivery | 50.00 |
| 4 | Ravindra Bage | Ravindra@example.com | Ravindra123 | 0987654321 | Lucknow | 1 | Standard Delivery | 50.00 |
| 3 | Latashree Shrivastava | Latashree@example.com | Lata123 | 0987654321 | Delhi | 1 | Standard Delivery | 50.00 |
| 2 | Aditya Khamare | Aditya@example.com | aditya123 | 0987654321 | Pune | 1 | Standard Delivery | 50.00 |
| 1 | Tanaygeet Shrivastava | Tanaygeet@example.com | tanay123 | 1234567890 | Indore | 1 | Standard Delivery | 50.00 |
| 10 | Dhairya jain | Dhairya@example.com | Dhairya123 | 0987654321 | Chennai | 2 | Express Delivery | 100.00 |
| 9 | Anush Jain | Anusha@example.com | Anush123 | 0987654321 | Udaipur | 2 | Express Delivery | 100.00 |
| 8 | Dev Suri | Dev@example.com | Dev123 | 0987654321 | Hyderabad | 2 | Express Delivery | 100.00 |
| 7 | Shruti Parmar | Shruti@example.com | Shruti123 | 0987654321 | Bangalore | 2 | Express Delivery | 100.00 |
| 6 | Soniya Tiwari | Soniya@example.com | Soniya123 | 0987654321 | Mumbai | 2 | Express Delivery | 100.00 |
| 5 | Kritika Sinha | Kritika@example.com | Kritika123 | 0987654321 | Irvine | 2 | Express Delivery | 100.00 |
| 4 | Ravindra Bage | Ravindra@example.com | Ravindra123 | 0987654321 | Lucknow | 2 | Express Delivery | 100.00 |
| 3 | Latashree Shrivastava | Latashree@example.com | Lata123 | 0987654321 | Delhi | 2 | Express Delivery | 100.00 |
| 2 | Aditya Khamare | Aditya@example.com | aditya123 | 0987654321 | Pune | 2 | Express Delivery | 100.00 |
| 1 | Tanaygeet Shrivastava | Tanaygeet@example.com | tanay123 | 1234567890 | Indore | 2 | Express Delivery | 100.00 |
| 10 | Dhairya jain | Dhairya@example.com | Dhairya123 | 0987654321 | Chennai | 3 | Same-Day Delivery | 150.00 |
| 9 | Anush Jain | Anusha@example.com | Anush123 | 0987654321 | Udaipur | 3 | Same-Day Delivery | 150.00 |
| 8 | Dev Suri | Dev@example.com | Dev123 | 0987654321 | Hyderabad | 3 | Same-Day Delivery | 150.00 |
| 7 | Shruti Parmar | Shruti@example.com | Shruti123 | 0987654321 | Bangalore | 3 | Same-Day Delivery | 150.00 |
| 6 | Soniya Tiwari | Soniya@example.com | Soniya123 | 0987654321 | Mumbai | 3 | Same-Day Delivery | 150.00 |
| 5 | Kritika Sinha | Kritika@example.com | Kritika123 | 0987654321 | Irvine | 3 | Same-Day Delivery | 150.00 |
| 4 | Ravindra Bage | Ravindra@example.com | Ravindra123 | 0987654321 | Lucknow | 3 | Same-Day Delivery | 150.00 |
| 3 | Latashree Shrivastava | Latashree@example.com | Lata123 | 0987654321 | Delhi | 3 | Same-Day Delivery | 150.00 |
| 2 | Aditya Khamare | Aditya@example.com | aditya123 | 0987654321 | Pune | 3 | Same-Day Delivery | 150.00 |
| 1 | Tanaygeet Shrivastava | Tanaygeet@example.com | tanay123 | 1234567890 | Indore | 3 | Same-Day Delivery | 150.00 |
| 10 | Dhairya jain | Dhairya@example.com | Dhairya123 | 0987654321 | Chennai | 4 | Overnight Delivery | 120.00 |
| 9 | Anush Jain | Anusha@example.com | Anush123 | 0987654321 | Udaipur | 4 | Overnight Delivery | 120.00 |
| 8 | Dev Suri | Dev@example.com | Dev123 | 0987654321 | Hyderabad | 4 | Overnight Delivery | 120.00 |
| 7 | Shruti Parmar | Shruti@example.com | Shruti123 | 0987654321 | Bangalore | 4 | Overnight Delivery | 120.00 |
| 6 | Soniya Tiwari | Soniya@example.com | Soniya123 | 0987654321 | Mumbai | 4 | Overnight Delivery | 120.00 |
| 5 | Kritika Sinha | Kritika@example.com | Kritika123 | 0987654321 | Irvine | 4 | Overnight Delivery | 120.00 |
| 4 | Ravindra Bage | Ravindra@example.com | Ravindra123 | 0987654321 | Lucknow | 4 | Overnight Delivery | 120.00 |
| 3 | Latashree Shrivastava | Latashree@example.com | Lata123 | 0987654321 | Delhi | 4 | Overnight Delivery | 120.00 |
| 2 | Aditya Khamare | Aditya@example.com | aditya123 | 0987654321 | Pune | 4 | Overnight Delivery | 120.00 |
| 1 | Tanaygeet Shrivastava | Tanaygeet@example.com | tanay123 | 1234567890 | Indore | 4 | Overnight Delivery | 120.00 |
| 10 | Dhairya jain | Dhairya@example.com | Dhairya123 | 0987654321 | Chennai | 5 | International Delivery | 200.00 |
| 9 | Anush Jain | Anusha@example.com | Anush123 | 0987654321 | Udaipur | 5 | International Delivery | 200.00 |
| 8 | Dev Suri | Dev@example.com | Dev123 | 0987654321 | Hyderabad | 5 | International Delivery | 200.00 |
| 7 | Shruti Parmar | Shruti@example.com | Shruti123 | 0987654321 | Bangalore | 5 | International Delivery | 200.00 |
| 6 | Soniya Tiwari | Soniya@example.com | Soniya123 | 0987654321 | Mumbai | 5 | International Delivery | 200.00 |
| 5 | Kritika Sinha | Kritika@example.com | Kritika123 | 0987654321 | Irvine | 5 | International Delivery | 200.00 |
| 4 | Ravindra Bage | Ravindra@example.com | Ravindra123 | 0987654321 | Lucknow | 5 | International Delivery | 200.00 |
| 3 | Latashree Shrivastava | Latashree@example.com | Lata123 | 0987654321 | Delhi | 5 | International Delivery | 200.00 |

```

37. List all employees and all locations, showing all possible combinations:

```
tanaygeet — mysql -u root -p — 164x54
mysql> SELECT e.*, l.*  

-> FROM Employee e  

-> CROSS JOIN Location l;  

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  

| EmployeeID | Name | Email | ContactNumber | Role | Salary | LocationID | LocationName | Address |  

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  

| 10 | Ashutosh | Ashutosh@company.com | 9900112233 | Operations Manager | 55000.00 | 1 | Main Warehouse | Saket, Indore |  

| 9 | Akshat | Akshat@company.com | 8899001122 | IT Support | 35000.00 | 1 | Main Warehouse | Saket, Indore |  

| 8 | Rishab | Rishab@company.com | 7788990011 | Driver | 27000.00 | 1 | Main Warehouse | Saket, Indore |  

| 7 | Akshita | Akshita@company.com | 6677889900 | Logistics Manager | 60000.00 | 1 | Main Warehouse | Saket, Indore |  

| 6 | Luv | Luv@company.com | 9345678972 | Customer Support | 28000.00 | 1 | Main Warehouse | Saket, Indore |  

| 5 | Anand | Anand@company.com | 6455667788 | Courier | 32000.00 | 1 | Main Warehouse | Saket, Indore |  

| 4 | Harsh | Harsh@company.com | 7344556677 | HR | 45000.00 | 1 | Main Warehouse | Saket, Indore |  

| 3 | Yogesh | Yogesh@company.com | 9233445566 | Warehouse Staff | 25000.00 | 1 | Main Warehouse | Saket, Indore |  

| 2 | Ronak | Ronak@company.com | 8566778899 | Courier | 30000.00 | 1 | Main Warehouse | Saket, Indore |  

| 1 | Pallavi | Pallavi@company.com | 9122334455 | Manager | 50000.00 | 1 | Main Warehouse | Saket, Indore |  

| 10 | Ashutosh | Ashutosh@company.com | 9900112233 | Operations Manager | 55000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 9 | Akshat | Akshat@company.com | 8899001122 | IT Support | 35000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 8 | Rishab | Rishab@company.com | 7788990011 | Driver | 27000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 7 | Akshita | Akshita@company.com | 6677889900 | Logistics Manager | 60000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 6 | Luv | Luv@company.com | 9345678972 | Customer Support | 28000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 5 | Anand | Anand@company.com | 6455667788 | Courier | 32000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 4 | Harsh | Harsh@company.com | 7344556677 | HR | 45000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 3 | Yogesh | Yogesh@company.com | 9233445566 | Warehouse Staff | 25000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 2 | Ronak | Ronak@company.com | 8566778899 | Courier | 30000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 1 | Pallavi | Pallavi@company.com | 9122334455 | Manager | 50000.00 | 2 | Branch Office | Magarpatta, Pune |  

| 10 | Ashutosh | Ashutosh@company.com | 9900112233 | Operations Manager | 55000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 9 | Akshat | Akshat@company.com | 8899001122 | IT Support | 35000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 8 | Rishab | Rishab@company.com | 7788990011 | Driver | 27000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 7 | Akshita | Akshita@company.com | 6677889900 | Logistics Manager | 60000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 6 | Luv | Luv@company.com | 9345678972 | Customer Support | 28000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 5 | Anand | Anand@company.com | 6455667788 | Courier | 32000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 4 | Harsh | Harsh@company.com | 7344556677 | HR | 45000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 3 | Yogesh | Yogesh@company.com | 9233445566 | Warehouse Staff | 25000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 2 | Ronak | Ronak@company.com | 8566778899 | Courier | 30000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 1 | Pallavi | Pallavi@company.com | 9122334455 | Manager | 50000.00 | 3 | Sorting Facility | Whitefield, Bangalore |  

| 10 | Ashutosh | Ashutosh@company.com | 9900112233 | Operations Manager | 55000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 9 | Akshat | Akshat@company.com | 8899001122 | IT Support | 35000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 8 | Rishab | Rishab@company.com | 7788990011 | Driver | 27000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 7 | Akshita | Akshita@company.com | 6677889900 | Logistics Manager | 60000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 6 | Luv | Luv@company.com | 9345678972 | Customer Support | 28000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 5 | Anand | Anand@company.com | 6455667788 | Courier | 32000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 4 | Harsh | Harsh@company.com | 7344556677 | HR | 45000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 3 | Yogesh | Yogesh@company.com | 9233445566 | Warehouse Staff | 25000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 2 | Ronak | Ronak@company.com | 8566778899 | Courier | 30000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 1 | Pallavi | Pallavi@company.com | 9122334455 | Manager | 50000.00 | 4 | Dispatch Center | Kormangla, Bangalore |  

| 10 | Ashutosh | Ashutosh@company.com | 9900112233 | Operations Manager | 55000.00 | 5 | International Hub | Hinjawadi, Pune |  

| 9 | Akshat | Akshat@company.com | 8899001122 | IT Support | 35000.00 | 5 | International Hub | Hinjawadi, Pune |  

| 8 | Rishab | Rishab@company.com | 7788990011 | Driver | 27000.00 | 5 | International Hub | Hinjawadi, Pune |  

| 7 | Akshita | Akshita@company.com | 6677889900 | Logistics Manager | 60000.00 | 5 | International Hub | Hinjawadi, Pune |  

| 6 | Luv | Luv@company.com | 9345678972 | Customer Support | 28000.00 | 5 | International Hub | Hinjawadi, Pune |  

| 5 | Anand | Anand@company.com | 6455667788 | Courier | 32000.00 | 5 | International Hub | Hinjawadi, Pune |  

| 4 | Harsh | Harsh@company.com | 7344556677 | HR | 45000.00 | 5 | International Hub | Hinjawadi, Pune |  

| 3 | Yogesh | Yogesh@company.com | 9233445566 | Warehouse Staff | 25000.00 | 5 | International Hub | Hinjawadi, Pune |
```

38. Retrieve a list of couriers and their corresponding sender information (if available)

```
tanaygeet — mysql -u root -p — 72x28
mysql> SELECT c.CourierID, c.SenderName, c.SenderAddress  

-> FROM Courier c;  

+-----+-----+-----+  

| CourierID | SenderName | SenderAddress |  

+-----+-----+-----+  

| 1 | Tanaygeet Shrivastava | Indore |  

| 2 | Aditya Khamare | Pune |  

| 3 | Latashree Shrivastava | Delhi |  

| 4 | Ravindra Bage | Lucknow |  

| 5 | Kritika Sinha | Irvine |  

| 6 | Soniya Tiwari | Mumbai |  

| 7 | Shruti Parmar | Bangalore |  

| 8 | Dev Suri | Hyderabad |  

| 9 | Anush Jain | Udaipur |  

| 10 | Dhairya Jain | Chennai |  

+-----+-----+-----+  

10 rows in set (0.01 sec)  

mysql>
```

39. Retrieve a list of couriers and their corresponding receiver information (if available):

```
tanaygeet — mysql -u root -p — 72x28
mysql> SELECT c.CourierID, c.ReceiverName, c.ReceiverAddress
[   -> FROM Courier c;
+-----+-----+-----+
| CourierID | ReceiverName | ReceiverAddress |
+-----+-----+-----+
|      1 | Aditya Khamare | Pune
|      2 | Tanaygeet Shrivastava | Indore
|      3 | Ravindra Bage | Lucknow
|      4 | Latashree Shrivastava | Delhi
|      5 | Soniya Tiwari | Mumbai
|      6 | Kritika Sinha | Irvine
|      7 | Dev Suri | Hyderabad
|      8 | Shruti Parmar | Bangalore
|      9 | Dhairya Jain | Chennai
|     10 | Anush Jain | Udaipur
+-----+-----+-----+
10 rows in set (0.01 sec)

mysql> █
```

40. Retrieve a list of couriers along with the courier service details (if available):

```
tanaygeet — mysql -u root -p — 148x39
mysql> SELECT c.*, s.*
[   -> LEFT JOIN CourierServices s ON c.ServiceID = s.ServiceID;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight | Status | TrackingNumber | DeliveryDate
| UserID | CreatedDate | EmployeeID | LocationID | ServiceID | ServiceID | ServiceName | Cost |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      1 | Tanaygeet Shrivastava | Indore | Aditya Khamare | Pune | 5.50 | In Transit | TRK123456 | 2023-09-23
|      1 | 2023-09-20 | 1 | 1 | 1 | Standard Delivery | 50.00 |
|      2 | Aditya Khamare | Pune | Tanaygeet Shrivastava | Indore | 3.00 | Delivered | TRK654321 | 2023-09-20
|      2 | 2023-08-12 | 1 | 2 | 2 | Express Delivery | 100.00 |
|      3 | Latashree Shrivastava | Delhi | Ravindra Bage | Lucknow | 7.40 | In Transit | TRK456745 | 2023-09-22
|      3 | 2023-09-10 | 1 | 3 | 3 | Same-Day Delivery | 150.00 |
|      4 | Ravindra Bage | Lucknow | Latashree Shrivastava | Delhi | 6.30 | In Transit | TRK534735 | 2023-09-19
|      4 | 2023-09-22 | 1 | 4 | 4 | Overnight Delivery | 120.00 |
|      5 | Kritika Sinha | Irvine | Soniya Tiwari | Mumbai | 9.30 | Delivered | TRK984274 | 2024-09-24
|      5 | 2023-09-15 | 1 | 5 | 5 | International Delivery | 200.00 |
|      6 | Soniya Tiwari | Mumbai | Kritika Sinha | Irvine | 3.80 | Delivered | TRK847263 | 2023-09-18
|      6 | 2023-09-18 | 1 | 6 | 6 | Economy Delivery | 40.00 |
|      7 | Shruti Parmar | Bangalore | Dev Suri | Hyderabad | 8.10 | In Transit | TRK204844 | 2023-09-15
|      7 | 2023-08-07 | 1 | 7 | 7 | Priority Delivery | 90.00 |
|      8 | Dev Suri | Hyderabad | Shruti Parmar | Bangalore | 4.50 | Delivered | TRK937541 | 2023-09-07
|      8 | 2023-09-04 | 1 | 8 | 8 | Bulk Delivery | 300.00 |
|      9 | Anush Jain | Udaipur | Dhairya Jain | Chennai | 1.98 | Delivered | TRK542764 | 2023-09-02
|      9 | 2023-09-23 | 1 | 9 | 9 | Freight Delivery | 500.00 |
|     10 | Dhairya Jain | Chennai | Anush Jain | Udaipur | 2.70 | In Transit | TRK431235 | 2023-09-12
|     10 | 2023-09-12 | 1 | 10 | 10 | Next-Morning Delivery | 130.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.13 sec)

mysql> █
```

41. Retrieve a list of employees and the number of couriers assigned to each employee:

```
tanaygeet — mysql -u root -p — 80x25
mysql> SELECT e.EmployeeID, e.Name, COUNT(c.CourierID) AS TotalCouriers
-> FROM Employee e
-> LEFT JOIN Courier c ON e.EmployeeID = c.EmployeeID
-> GROUP BY e.EmployeeID;
+-----+-----+-----+
| EmployeeID | Name      | TotalCouriers |
+-----+-----+-----+
|      1 | Pallavi   |          10 |
|      2 | Ronak     |           0 |
|      3 | Yogesh    |           0 |
|      4 | Harsh     |           0 |
|      5 | Anand     |           0 |
|      6 | Luv        |           0 |
|      7 | Akshita   |           0 |
|      8 | Rishab    |           0 |
|      9 | Akshat    |           0 |
|     10 | Ashutosh  |           0 |
+-----+-----+-----+
10 rows in set (0.06 sec)

mysql>
```

42. Retrieve a list of locations and the total payment amount received at each location:

```
tanaygeet — mysql -u root -p — 80x25
mysql> SELECT l.LocationID, l.LocationName, SUM(p.Amount) AS TotalPayments
-> FROM Location l
-> JOIN Payment p ON l.LocationID = p.LocationID
-> GROUP BY l.LocationID;
+-----+-----+-----+
| LocationID | LocationName      | TotalPayments |
+-----+-----+-----+
|      1 | Main Warehouse   |       55.00 |
|      2 | Branch Office    |      105.00 |
|      3 | Sorting Facility |      120.00 |
|      4 | Dispatch Center  |       95.00 |
|      5 | International Hub|       60.00 |
|      6 | Customer Pickup Point | 110.00 |
|      7 | Delivery Office  |       80.00 |
|      8 | Distribution Center | 115.00 |
|      9 | Logistics Center |       70.00 |
|     10 | Remote Hub       |      130.00 |
+-----+-----+-----+
10 rows in set (0.01 sec)

mysql>
```

43. Retrieve all couriers sent by the same sender (based on SenderName).

```
tanaygeet — mysql -u root -p — 192x16

mysql> SELECT *
-> FROM Courier
-> WHERE SenderName = 'Tanaygeet Shrivastava';
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight | Status | TrackingNumber | DeliveryDate | UserID | CreatedDate | EmployeeID | LocationID |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Tanaygeet Shrivastava | Indore | Aditya Khamare | Pune | 5.50 | In Transit | TRK123456 | 2023-09-23 | 1 | 2023-09-20 | 1 | 1 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

mysql>
```

44. List all employees who share the same role.

```
tanaygeet — mysql -u root -p — 84x16

mysql> SELECT e1.*
-> FROM Employee e1
-> JOIN Employee e2 ON e1.Role = e2.Role AND e1.EmployeeID <> e2.EmployeeID;
+-----+-----+-----+-----+-----+
| EmployeeID | Name | Email | ContactNumber | Role | Salary |
+-----+-----+-----+-----+-----+
| 5 | Anand | Anand@company.com | 6455667788 | Courier | 32000.00 |
| 2 | Ronak | Ronak@company.com | 8566778899 | Courier | 30000.00 |
+-----+-----+-----+-----+-----+
2 rows in set (0.02 sec)

mysql>
```

45. Retrieve all payments made for couriers sent from the same location.

```
tanaygeet — mysql -u root -p — 84x16

mysql> SELECT p.*, c.SenderAddress
-> FROM Payment p
-> JOIN Courier c ON p.CourierID = c.CourierID
[ -> WHERE c.SenderAddress = 'Indore'];
+-----+-----+-----+-----+-----+-----+
| PaymentID | CourierID | LocationID | Amount | PaymentDate | SenderAddress |
+-----+-----+-----+-----+-----+
| 1 | 1 | 1 | 55.00 | 2023-09-23 | Indore |
+-----+-----+-----+-----+
1 row in set (0.05 sec)

mysql>
```

46. Retrieve all couriers sent from the same location (based on SenderAddress).

```
tanaygeet — mysql -u root -p — 192x13

mysql> SELECT *
-> FROM Courier
-> WHERE SenderAddress = 'Pune';
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| CourierID | SenderName | SenderAddress | ReceiverName | ReceiverAddress | Weight | Status | TrackingNumber | DeliveryDate | UserID | CreatedDate | EmployeeID | LocationID |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 2 | Aditya Khamare | Pune | Tanaygeet Shrivastava | Indore | 3.00 | Delivered | TRK654321 | 2023-09-20 | 2 | 2023-08-12 | 1 | 2 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

47. List employees and the number of couriers they have delivered:

```
tanaygeet — mysql -u root -p — 81x14

mysql>
mysql> SELECT e.EmployeeID, e.Name, COUNT(c.CourierID) AS TotalDeliveredCouriers
-> FROM Employee e
-> JOIN Courier c ON e.EmployeeID = c.EmployeeID
-> WHERE c.Status = 'Delivered'
-> GROUP BY e.EmployeeID;
+-----+-----+
| EmployeeID | Name | TotalDeliveredCouriers |
+-----+-----+
| 1 | Pallavi | 5 |
+-----+-----+
1 row in set (0.01 sec)

mysql>
```

48. Find couriers that were paid an amount greater than the cost of their respective courier services.

```
tanaygeet — mysql -u root -p — 81x20

mysql> SELECT c.CourierID, c.ServiceID, SUM(p.Amount) AS TotalPayments, s.Cost
-> FROM Courier c
-> JOIN Payment p ON c.CourierID = p.CourierID
-> JOIN CourierServices s ON c.ServiceID = s.ServiceID
-> GROUP BY c.CourierID
-> HAVING TotalPayments > s.Cost;
+-----+-----+-----+-----+
| CourierID | ServiceID | TotalPayments | Cost |
+-----+-----+-----+-----+
| 1 | 1 | 55.00 | 50.00 |
| 2 | 2 | 105.00 | 100.00 |
| 6 | 6 | 110.00 | 40.00 |
+-----+-----+-----+-----+
3 rows in set (0.01 sec)

mysql>
```