ASSIGNMENT 4- COURIER MANAGEMENT SYSTEM

TASK 1

(Used MySql Command Line Client – Unicode)

**TABLE CREATION:**

mysql> CREATE DATABASE ASSIGNMENT;

Query OK, 1 row affected (0.03 sec)

mysql> show databases;

```
+--------------------+
| Database           |
+--------------------+
| assignment         |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| testdb             |
+--------------------+
```

6 rows in set (0.00 sec)

mysql> use assignment;

Database changed

mysql> CREATE TABLE User (UserID int, Name varchar(255), Email varchar(255), Password varchar(255), ContactNumber varchar(255), Address TEXT, CONSTRAINT user_userid_pk PRIMARY KEY(userid), CONSTRAINT uq_email UNIQUE (Email));

Query OK, 0 rows affected (0.05 sec)

mysql> desc user;

```
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| UserID       | int          | NO   | PRI | NULL    |       |
| Name         | varchar(255) | YES  |     | NULL    |       |
| Email        | varchar(255) | YES  | UNI | NULL    |       |
| Password     | varchar(255) | YES  |     | NULL    |       |
| ContactNumber| varchar(255) | YES  |     | NULL    |       |
| Address      | text         | YES  |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
```
6 rows in set (0.00 sec)


mysql> CREATE TABLE Courier (CourierID int, SenderName varchar(255), SenderAddress TEXT, ReceiverName varchar(255), ReceiverAddress TEXT, Weight decimal(5,2), Status varchar(50), TrackingNumber varchar(20), DeliveryDate date, CONSTRAINT table_courierId_pk PRIMARY KEY(CourierID), CONSTRAINT uq_trackingnumber UNIQUE (trackingNumber));
Query OK, 0 rows affected (0.05 sec)


mysql> desc Courier;

```
+----------------+--------------+------+-----+---------+-------+
| Field          | Type         | Null | Key | Default | Extra |
+----------------+--------------+------+-----+---------+-------+
| CourierID      | int          | NO   | PRI | NULL    |       |
| SenderName     | varchar(255) | YES  |     | NULL    |       |
| SenderAddress  | text         | YES  |     | NULL    |       |
```

```
| ReceiverName    | varchar(255) | YES |     | NULL    |       |
| ReceiverAddress | text         | YES |     | NULL    |       |
| Weight          | decimal(5,2) | YES |     | NULL    |       |
| Status          | varchar(50)  | YES |     | NULL    |       |
| TrackingNumber  | varchar(20)  | YES | UNI | NULL    |       |
| DeliveryDate    | date         | YES |     | NULL    |       |
+-----------------+--------------+------+-----+---------+-------+
9 rows in set (0.03 sec)
```

mysql> CREATE TABLE CourierServices(ServiceID int, ServiceName varchar(100), Cost decimal(8,

2), CONSTRAINT table_ServiceId_pk PRIMARY KEY(ServiceID));

Query OK, 0 rows affected (0.05 sec)


mysql> desc CourierServices;

```
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| ServiceID   | int          | NO   | PRI | NULL    |       |
| ServiceName | varchar(100) | YES  |     | NULL    |       |
| Cost        | decimal(8,2) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

mysql> CREATE TABLE Employee_Table(EmployeeID int,Name varchar(255), Email varchar(255), ContactNumber varchar(20), Role varchar(50), Salary decimal(10,2), CONSTRAINT emp_empid_pk PRIMARY KEY(employeeid), CONSTRAINT uq_email UNIQUE (Email));

Query OK, 0 rows affected (0.03 sec)

```
mysql> desc Employee_Table;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| EmployeeID    | int          | NO   | PRI | NULL    |       |
| Name          | varchar(255) | YES  |     | NULL    |       |
| Email         | varchar(255) | YES  | UNI | NULL    |       |
| ContactNumber | varchar(20)  | YES  |     | NULL    |       |
| Role          | varchar(50)  | YES  |     | NULL    |       |
| Salary        | decimal(10,2)| YES  |     | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

mysql> CREATE TABLE Location_Table(LocationID int, LocationName varchar(100), Address TEXT, CONSTRAINT loc_locid_pk PRIMARY KEY(LocationID));
Query OK, 0 rows affected (0.04 sec)

```
mysql> desc Location_Table;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| LocationID   | int          | NO   | PRI | NULL    |       |
| LocationName | varchar(100) | YES  |     | NULL    |       |
| Address      | text         | YES  |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

mysql> CREATE TABLE Payment_Table(PaymentId int,CourierId int, LocationId int, Amount Decimal(10,2), PaymentDate Date,CONSTRAINT Pay_Payid_pk PRIMARY KEY(PaymentId), CONSTRAINT FOREIGN

 KEY (CourierId) REFERENCES Courier(CourierID), CONSTRAINT FOREIGN KEY (LocationId) REFERENCES LOCATION_TABLE(LOCATIONID));

Query OK, 0 rows affected (0.06 sec)


mysql> desc Payment_Table;

```
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| PaymentId   | int          | NO   | PRI | NULL    |       |
| CourierId   | int          | YES  | MUL | NULL    |       |
| LocationId  | int          | YES  | MUL | NULL    |       |
| Amount      | decimal(10,2)| YES  |     | NULL    |       |
| PaymentDate | date         | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
```

5 rows in set (0.00 sec)

## INSERTION OF DUPLICATE VALUES:

mysql> INSERT INTO user (UserID, Name, Email, Password, ContactNumber, Address) VALUES

   -> (1, 'John Doe', 'john.doe@example.com', 'Pass@123', '9876543210', '123 Main St, New York'),

   -> (2, 'Jane Smith', 'jane.smith@example.com', 'Jane#456', '9876543220', '456 Oak St, Los Angeles'),

   -> (3, 'Alice Brown', 'alice.brown@example.com', 'Alice@789', '9876543230', '789 Pine St, Chicago'),

```
    -> (4, 'Bob Johnson', 'bob.johnson@example.com', 'Bob@101', '9876543240',
'101 Maple St, Houston'),

    -> (5, 'Emily Davis', 'emily.davis@example.com', 'Emily#202', '9876543250',
'202 Cedar St, Miami'),

    -> (6, 'Michael Wilson', 'michael.wilson@example.com', 'Mike@303',
'9876543260', '303 Elm St, Seattle');
```
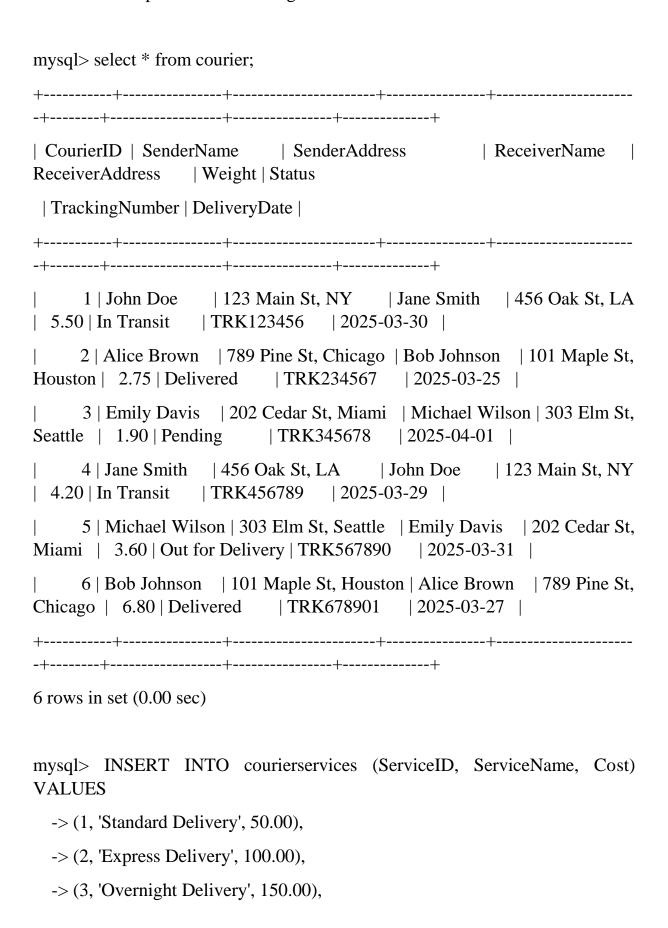
Query OK, 6 rows affected (0.03 sec)

Records: 6  Duplicates: 0  Warnings: 0


mysql> desc user;

```
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| UserID        | int          | NO   | PRI | NULL    |       |
| Name          | varchar(255) | YES  |     | NULL    |       |
| Email         | varchar(255) | YES  | UNI | NULL    |       |
| Password      | varchar(255) | YES  |     | NULL    |       |
| ContactNumber | varchar(255) | YES  |     | NULL    |       |
| Address       | text         | YES  |     | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
```
6 rows in set (0.01 sec)


mysql> select * from user;

```
+--------+---------------+--------------------------+-----------+---------------+------------------------+
| UserID | Name          | Email                    | Password  | ContactNumber | Address                |
+--------+---------------+--------------------------+-----------+---------------+------------------------+
```

| 1 | John Doe | john.doe@example.com | Pass@123 | 9876543210 | 123 Main St, New York |

| 2 | Jane Smith | jane.smith@example.com | Jane#456 | 9876543220 | 456 Oak St, Los Angeles |

| 3 | Alice Brown | alice.brown@example.com | Alice@789 | 9876543230 | 789 Pine St, Chicago |

| 4 | Bob Johnson | bob.johnson@example.com | Bob@101 | 9876543240 | 101 Maple St, Houston |

| 5 | Emily Davis | emily.davis@example.com | Emily#202 | 9876543250 | 202 Cedar St, Miami |

| 6 | Michael Wilson | michael.wilson@example.com | Mike@303 | 9876543260 | 303 Elm St, Seattle |

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

6 rows in set (0.00 sec)


mysql> INSERT INTO courier (CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, DeliveryDate) VALUES

    -> (1, 'John Doe', '123 Main St, NY', 'Jane Smith', '456 Oak St, LA', 5.50, 'In Transit', 'TRK123456', '2025-03-30'),

    -> (2, 'Alice Brown', '789 Pine St, Chicago', 'Bob Johnson', '101 Maple St, Houston', 2.75, 'Delivered', 'TRK234567', '2025-03-25'),

    -> (3, 'Emily Davis', '202 Cedar St, Miami', 'Michael Wilson', '303 Elm St, Seattle', 1.90, 'Pending', 'TRK345678', '2025-04-01'),

    -> (4, 'Jane Smith', '456 Oak St, LA', 'John Doe', '123 Main St, NY', 4.20, 'In Transit', 'TRK456789', '2025-03-29'),

    -> (5, 'Michael Wilson', '303 Elm St, Seattle', 'Emily Davis', '202 Cedar St, Miami', 3.60, 'Out for Delivery', 'TRK567890', '2025-03-31'),

    -> (6, 'Bob Johnson', '101 Maple St, Houston', 'Alice Brown', '789 Pine St, Chicago', 6.80, 'Delivered', 'TRK678901', '2025-03-27');

Query OK, 6 rows affected (0.01 sec)

Records: 6  Duplicates: 0  Warnings: 0

mysql> select * from courier;

+-----------+---------------+--------------------+---------------+----------------------+--------+----------------+----------------+--------------+
| CourierID | SenderName    | SenderAddress        | ReceiverName  | ReceiverAddress      | Weight | Status         | TrackingNumber | DeliveryDate |
+-----------+---------------+--------------------+---------------+----------------------+--------+----------------+----------------+--------------+
|         1 | John Doe      | 123 Main St, NY      | Jane Smith    | 456 Oak St, LA       |   5.50 | In Transit     | TRK123456      | 2025-03-30   |
|         2 | Alice Brown   | 789 Pine St, Chicago | Bob Johnson   | 101 Maple St, Houston |   2.75 | Delivered      | TRK234567      | 2025-03-25   |
|         3 | Emily Davis   | 202 Cedar St, Miami  | Michael Wilson | 303 Elm St, Seattle  |   1.90 | Pending        | TRK345678      | 2025-04-01   |
|         4 | Jane Smith    | 456 Oak St, LA       | John Doe      | 123 Main St, NY      |   4.20 | In Transit     | TRK456789      | 2025-03-29   |
|         5 | Michael Wilson | 303 Elm St, Seattle | Emily Davis   | 202 Cedar St, Miami  |   3.60 | Out for Delivery | TRK567890    | 2025-03-31   |
|         6 | Bob Johnson   | 101 Maple St, Houston | Alice Brown  | 789 Pine St, Chicago |   6.80 | Delivered      | TRK678901      | 2025-03-27   |
+-----------+---------------+--------------------+---------------+----------------------+--------+----------------+----------------+--------------+
6 rows in set (0.00 sec)

mysql> INSERT INTO courierservices (ServiceID, ServiceName, Cost) VALUES
    -> (1, 'Standard Delivery', 50.00),
    -> (2, 'Express Delivery', 100.00),
    -> (3, 'Overnight Delivery', 150.00),

-> (4, 'International Shipping', 200.00),

        -> (5, 'Same-Day Delivery', 120.00),

        -> (6, 'Freight Shipping', 300.00);

Query OK, 6 rows affected (0.01 sec)

Records: 6  Duplicates: 0  Warnings: 0


mysql> select * from courierservices;

+-----------+----------------------+--------+
| ServiceID | ServiceName          | Cost   |
+-----------+----------------------+--------+
|         1 | Standard Delivery    |  50.00 |
|         2 | Express Delivery     | 100.00 |
|         3 | Overnight Delivery   | 150.00 |
|         4 | International Shipping | 200.00 |
|         5 | Same-Day Delivery    | 120.00 |
|         6 | Freight Shipping     | 300.00 |
+-----------+----------------------+--------+

6 rows in set (0.00 sec)


mysql> INSERT INTO employee_table (EmployeeID, Name, Email, ContactNumber, Role, Salary) VALUES

    -> (1, 'David Miller', 'david.miller@example.com', '9876543270', 'Delivery Driver', 35000.00),

    -> (2, 'Sophia Lee', 'sophia.lee@example.com', '9876543280', 'Warehouse Manager', 45000.00),

    -> (3, 'James Anderson', 'james.anderson@example.com', '9876543290', 'Logistics Coordinator', 40000.00),

    -> (4, 'Linda Martinez', 'linda.martinez@example.com', '9876543300', 'Customer Support', 32000.00),

-> (5, 'Robert Thomas', 'robert.thomas@example.com', '9876543310', 'Fleet Manager', 55000.00),

       -> (6, 'Jessica Wilson', 'jessica.wilson@example.com', '9876543320', 'Dispatcher', 38000.00);

Query OK, 6 rows affected (0.01 sec)

Records: 6  Duplicates: 0  Warnings: 0


mysql> select * from employee_table;

+------------+----------------+--------------------------+---------------+----------------------+-----------+
| EmployeeID | Name           | Email                    | ContactNumber | Role                 | Salary    |
+------------+----------------+--------------------------+---------------+----------------------+-----------+
|          1 | David Miller   | david.miller@example.com  | 9876543270    | Delivery Driver      | 35000.00 |
|          2 | Sophia Lee     | sophia.lee@example.com    | 9876543280    | Warehouse Manager    | 45000.00 |
|          3 | James Anderson | james.anderson@example.com | 9876543290   | Logistics Coordinator | 40000.00 |
|          4 | Linda Martinez | linda.martinez@example.com | 9876543300   | Customer Support     | 32000.00 |
|          5 | Robert Thomas  | robert.thomas@example.com  | 9876543310    | Fleet Manager        | 55000.00 |
|          6 | Jessica Wilson | jessica.wilson@example.com | 9876543320   | Dispatcher           | 38000.00 |
+------------+----------------+--------------------------+---------------+----------------------+-----------+

6 rows in set (0.00 sec)

mysql> INSERT INTO location_table (LocationID, LocationName, Address) VALUES
    -> (1, 'New York Hub', '123 Warehouse Ave, NY'),
    -> (2, 'Los Angeles Depot', '456 Shipping Lane, LA'),
    -> (3, 'Chicago Center', '789 Freight St, Chicago'),
    -> (4, 'Houston Terminal', '101 Cargo Blvd, Houston'),
    -> (5, 'Miami Station', '202 Express Rd, Miami'),
    -> (6, 'Seattle Facility', '303 Logistics Dr, Seattle');

Query OK, 6 rows affected (0.00 sec)
Records: 6  Duplicates: 0  Warnings: 0


mysql> select * from location_table;
+------------+------------------+-------------------------+
| LocationID | LocationName     | Address                 |
+------------+------------------+-------------------------+
|          1 | New York Hub     | 123 Warehouse Ave, NY   |
|          2 | Los Angeles Depot| 456 Shipping Lane, LA   |
|          3 | Chicago Center   | 789 Freight St, Chicago |
|          4 | Houston Terminal | 101 Cargo Blvd, Houston |
|          5 | Miami Station    | 202 Express Rd, Miami   |
|          6 | Seattle Facility | 303 Logistics Dr, Seattle|
+------------+------------------+-------------------------+
6 rows in set (0.00 sec)


mysql> INSERT INTO payment_table (PaymentID, CourierID, LocationID, Amount, PaymentDate) VALUES

```
        -> (1, 1, 1, 50.00, '2025-03-28'),
        -> (2, 2, 3, 100.00, '2025-03-26'),
        -> (3, 3, 5, 75.00, '2025-04-02'),
        -> (4, 4, 2, 120.00, '2025-03-29'),
        -> (5, 5, 6, 90.00, '2025-04-01'),
        -> (6, 6, 4, 60.00, '2025-03-27');
Query OK, 6 rows affected (0.01 sec)
Records: 6  Duplicates: 0  Warnings: 0


mysql> select * from payment_table;
+-----------+-----------+------------+--------+-------------+
| PaymentId | CourierId | LocationId | Amount | PaymentDate |
+-----------+-----------+------------+--------+-------------+
|         1 |         1 |          1 |  50.00 | 2025-03-28  |
|         2 |         2 |          3 | 100.00 | 2025-03-26  |
|         3 |         3 |          5 |  75.00 | 2025-04-02  |
|         4 |         4 |          2 | 120.00 | 2025-03-29  |
|         5 |         5 |          6 |  90.00 | 2025-04-01  |
|         6 |         6 |          4 |  60.00 | 2025-03-27  |
+-----------+-----------+------------+--------+-------------+
6 rows in set (0.00 sec)
```