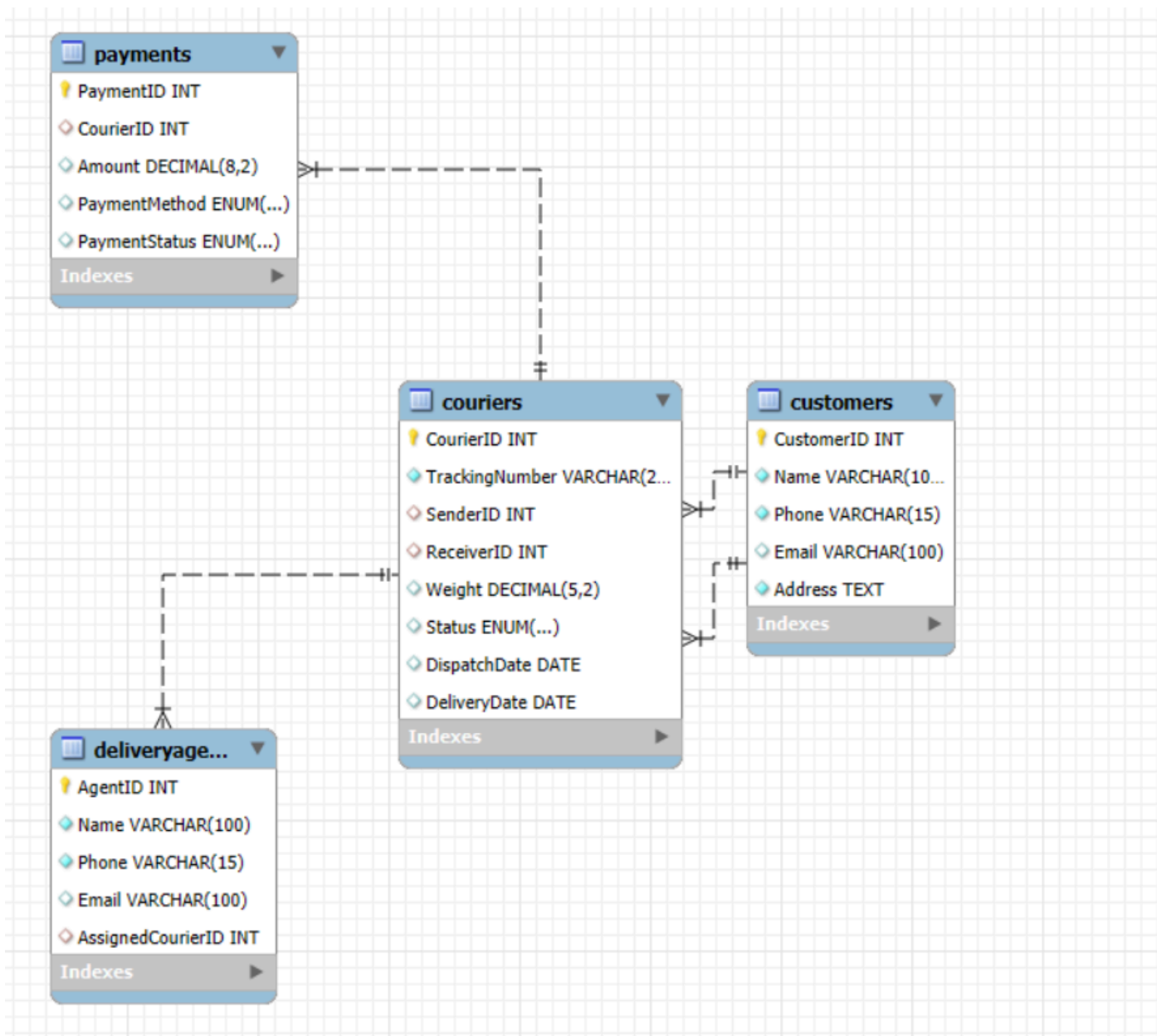


TASK - 1

Courier Management System:

ER Diagram:



SQL QUERY:

```
CREATE DATABASE KrishDeliverss;  
USE KrishDeliverss;
```

```
CREATE TABLE Customers (  
    CustomerID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL,  
    Phone VARCHAR(15) UNIQUE NOT NULL,  
    Email VARCHAR(100) UNIQUE,  
    Address TEXT NOT NULL  
);
```

```
CREATE TABLE Couriers (  
    CourierID INT PRIMARY KEY AUTO_INCREMENT,  
    TrackingNumber VARCHAR(20) UNIQUE NOT NULL,  
    SenderID INT,  
    ReceiverID INT,  
    Weight DECIMAL(5,2),  
    Status ENUM('Pending', 'In Transit', 'Delivered', 'Cancelled') DEFAULT  
'Pending',  
    DispatchDate DATE,  
    DeliveryDate DATE,  
    FOREIGN KEY (SenderID) REFERENCES Customers(CustomerID),  
    FOREIGN KEY (ReceiverID) REFERENCES Customers(CustomerID)  
);
```

```
CREATE TABLE DeliveryAgents (  
    AgentID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL,  
    Phone VARCHAR(15) UNIQUE NOT NULL,  
    Email VARCHAR(100) UNIQUE,  
    AssignedCourierID INT,  
    FOREIGN KEY (AssignedCourierID) REFERENCES Couriers(CourierID) ON  
DELETE SET NULL  
);
```

```
CREATE TABLE Payments (  
    PaymentID INT PRIMARY KEY AUTO_INCREMENT,  
    CourierID INT,  
    Amount DECIMAL(8,2),  
    PaymentMethod ENUM('Cash', 'Card', 'Online'),  
    PaymentStatus ENUM('Pending', 'Completed', 'Failed') DEFAULT 'Pending',  
    FOREIGN KEY (CourierID) REFERENCES Couriers(CourierID)  
);
```

```
SHOW Tables;
```

```
INSERT INTO Customers (Name, Phone, Email, Address)  
VALUES  
( 'Karthik', '9012345678', 'karthik@example.com', '10A, MG Road, Chennai'),  
( 'Harini', '9023456789', 'harini@example.com', '22B, Anna Nagar, Chennai'),  
( 'Harshini', '9034567890', 'harshini@example.com', '35C, T Nagar, Chennai'),  
( 'Gayathri', '9045678901', 'gayathri@example.com', '14D, Velachery, Chennai'),  
( 'Malli', '9056789012', 'malli@example.com', '7E, Adyar, Chennai');
```

```
INSERT INTO Couriers (TrackingNumber, SenderID, ReceiverID, Weight, Status,  
DispatchDate)  
VALUES  
( 'KRISH1001', 1, 2, 3.2, 'Pending', '2025-03-18'),  
( 'KRISH1002', 3, 4, 1.5, 'In Transit', '2025-03-17'),  
( 'KRISH1003', 5, 1, 2.8, 'Delivered', '2025-03-15');
```

```
INSERT INTO DeliveryAgents (Name, Phone, Email)  
VALUES  
( 'David Johnson', '7654321098', 'david@example.com'),  
( 'Anand Kumar', '7665432109', 'anand@example.com');
```

```
INSERT INTO Payments (CourierID, Amount, PaymentMethod, PaymentStatus)  
VALUES  
(1, 450.00, 'Online', 'Pending'),  
(2, 300.00, 'Cash', 'Completed'),
```

(3, 150.00, 'Card', 'Completed');

SELECT * FROM Couriers WHERE Status = 'In Transit';

SELECT Name, Phone, Email, Address FROM Customers;

SELECT * FROM Customers;

SELECT * FROM Couriers WHERE SenderID = (SELECT CustomerID FROM Customers WHERE Name = 'Karthik');

SELECT * FROM Couriers;

SELECT * FROM Couriers WHERE TrackingNumber = 'KRISH1001';

SELECT * FROM Couriers WHERE Status = 'Delivered';

SELECT * FROM Couriers WHERE Status != 'Delivered';




SELECT * FROM Couriers WHERE DeliveryDate = CURDATE();

SELECT * FROM Couriers WHERE Status = 'In Transit';

SELECT AssignedCourierID, COUNT(*) AS TotalPackages FROM Couriers
GROUP BY AssignedCourierID;

SELECT AssignedCourierID, AVG(DATEDIFF(DeliveryDate, DispatchDate)) AS
AvgDeliveryTime
FROM Couriers WHERE DeliveryDate IS NOT NULL GROUP BY
AssignedCourierID;

SAMPLE OUTPUT:

Result Grid		Filter Rows: <input type="text"/>	Export: 	Wrap Cell Content: 		
	Field	Type	Null	Key	Default	Extra
▶	CustomerID	int	NO	PRI	NULL	auto_increment
	Name	varchar(100)	NO		NULL	
	Phone	varchar(15)	NO	UNI	NULL	
	Email	varchar(100)	YES	UNI	NULL	
	Address	text	NO		NULL	

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	CourierID	int	NO	PRI	NULL	auto_increment
	TrackingNumber	varchar(20)	NO	UNI	NULL	
	SenderID	int	YES	MUL	NULL	
	ReceiverID	int	YES	MUL	NULL	
	Weight	decimal(5,2)	YES		NULL	
	Status	enum('Pending','In Transit','Delivered','Cancelled')	YES		Pending	
	DispatchDate	date	YES		NULL	
	DeliveryDate	date	YES		NULL	

Result Grid		Filter Rows:		Export:		Wrap Cell Content:	
	Field	Type	Null	Key	Default	Extra	
▶	CustomerID	int	NO	PRI	NULL	auto_increment	
	Name	varchar(100)	NO		NULL		
	Phone	varchar(15)	NO	UNI	NULL		
	Email	varchar(100)	YES	UNI	NULL		
	Address	text	NO		NULL		

[illegible]

