TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
TN123456	2025-03-01	1	2	1
TN789012	2025-03-02	1	2	2
TN345678	2025-03-03	2	3	2
TN345679	2025-03-17	2	3	2
TN234567	2025-03-04	1	2	2
TN345688	2025-03-05	2	3	1
TN456789	2025-03-06	3	2	2
TN567890	2025-03-07	3	2	1
TN678901	2025-03-08	2	3	2

30. Get Payment Details with Location

```sql
select p.*, l.* from Payment p left join Location l on p.LocationID = l.LocationID
```

Results | **Messages**

	PaymentID	CourierID	LocationID	Amount	PaymentDate	EmployeeID	LocationID	LocationName	Address
1	1	1	1	10000.00	2024-03-03	2	1	Warehouse1	789 Storage St, Chennai
2	2	2	2	1500.00	2024-03-04	2	2	Warehouse2	456 Logistics Ave, Bangalore
3	3	3	3	1200.50	2024-03-05	3	3	Warehouse3	123 Distribution Rd, Hyderabad
4	4	4	1	1500.00	2024-03-06	2	1	Warehouse1	789 Storage St, Chennai
5	5	5	2	1000.00	2024-03-07	3	2	Warehouse2	456 Logistics Ave, Bangalore
6	6	6	3	25000.00	2024-03-08	2	3	Warehouse3	123 Distribution Rd, Hyderabad
7	7	7	1	2000.00	2024-03-09	3	1	Warehouse1	789 Storage St, Chennai
8	8	8	2	1200.50	2024-03-10	2	2	Warehouse2	456 Logistics Ave, Bangalore
9	9	9	2	1200.50	2024-03-10	2	2	Warehouse2	456 Logistics Ave, Bangalore

31. Calculating Total Payments for Each Courier

```sql
select cp.CourierID, cp.SenderName, cp.ReceiverName, sum(p.Amount) as TotalPayments
from Courier cp left join Payment p on cp.CourierID = p.CourierID group by
cp.CourierID, cp.SenderName, cp.ReceiverName
```

Results | **Messages**

	CourierID	SenderName	ReceiverName	TotalPayments
1	1	Rajesh Kumar	Ananya Singh	10000.00
2	2	Priya Sharma	Amit Patel	1500.00
3	3	Amit Patel	Priya Sharma	1200.50
4	4	Ananya Singh	Rajesh Kumar	1500.00
5	5	Sara Khan	David Lee	1000.00
6	6	Michael Johnson	Emma Wilson	25000.00
7	7	Emma Wilson	Michael Johnson	2000.00
8	8	David Lee	Sara Khan	1200.50
9	9	Rajesh Kumar	Sara Khan	1200.50

32. List Payments within a Date Range

```sql
select * from Payment where PaymentDate between '2024-02-01' and '2024-03-08'
```

Results | Messages

	PaymentID	CourierID	LocationID	Amount	PaymentDate	EmployeeID
1	1	1	1	10000.00	2024-03-03	2
2	2	2	2	1500.00	2024-03-04	2
3	3	3	3	1200.50	2024-03-05	3
4	4	4	1	1500.00	2024-03-06	2
5	5	5	2	1000.00	2024-03-07	3
6	6	6	3	25000.00	2024-03-08	2

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

```sql
select us.*, cs.* from Users us full outer join  Courier cs on us.name = cs.SenderName
```

	UserID	Name	Email	Password	ContactNumber	Address	CourierID	SenderName	SenderAddress	ReceiverName
1	1	Ram kumar	ram.kumar@email.com	password123	8912354678	11,mothilal street Chennai	NULL	NULL	NULL	NULL
2	2	Rahavan	rahavan@email.com	password456	6754327689	34 Kothvari Street,Bangalore	NULL	NULL	NULL	NULL
3	3	Amit Patel	amit.patel@email.com	password789	7654321098	56 Krishna Lane, Hyderabad	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma
4	4	Ananya Singh	ananya.singh@email.com	passwordabc	6543210987	78 Vindhya Nagar,Coimbatore	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar
5	5	Sara Khan	sara.khan@email.com	passwordxyz	5432109876	90 Yamuna Road, Delhi	5	Sara Khan	90 Yamuna Road, Delhi	David Lee
6	6	Michael Johnson	michael.johnson@email.com	password123	6547893210	23 Park Street,Mumbai	6	Michael Johnson	23 Park Street, Mumbai	Emma Wilson
7	7	Ram kumar	ramkumar@email.com	password765	7896543210	45 Lake Avenue, Kolkata	NULL	NULL	NULL	NULL
8	8	David Lee	david.lee@email.com	password432	9876543210	67 Forest Lane, Pune	8	David Lee	67 Forest Lane, Pune	Sara Khan
9	9	Sophia	sophia@email.com	password278	8765432109	89 Ocean View, Goa	NULL	NULL	NULL	NULL
10	NULL	NULL	NULL	NULL	NULL	NULL	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh
11	NULL	NULL	NULL	NULL	NULL	NULL	2	Priya Sharma	34 Kaveri Street, Bangalore	Amit Patel
12	NULL	NULL	NULL	NULL	NULL	NULL	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson
13	NULL	NULL	NULL	NULL	NULL	NULL	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan

ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
67 Forest Lane, Pune	2.00	In Transit	TN234567	2025-03-04	1	2	2
45 Lake Avenue, Kolkata	1.50	Delivered	TN345688	2025-03-05	2	3	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
56 Krishna Lane, Hyderabad	1.80	Delivered	TN789012	2025-03-02	1	2	2
23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

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

```sql
  select c.*, cs.* from Courier c full outer join CourierServices cs on c.ServiceID = cs.ServiceID
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh	78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
2	2	Priya Sharma	34 Kaveri Street, Bangalore	Amit Patel	56 Krishna Lane, Hyderabad	1.80	Delivered	TN789012	2025-03-02	1	2	2
3	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma	34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
4	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar	12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
5	5	Sara Khan	90 Yamuna Road, Delhi	David Lee	67 Forest Lane, Pune	2.00	In Transit	TN234567	2025-03-04	1	2	2
6	6	Michael Johnson	23 Park Street, Mumbai	Emma Wilson	45 Lake Avenue, Kolkata	1.50	Delivered	TN345688	2025-03-05	2	3	1
7	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson	23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
8	8	David Lee	67 Forest Lane, Pune	Sara Khan	90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1
9	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan	90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

ServiceId	ServiceName	Cost
1	Standard	10.00
2	Express	15.00
2	Express	15.00
2	Express	15.00
2	Express	15.00
1	Standard	10.00
2	Express	15.00
1	Standard	10.00
2	Express	15.00

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

```
select e.*, py.* from Employee e full outer join Payment py on e.EmployeeID =
py.EmployeeID
```

	EmployeeId	Name	Email	ContactNumber	Role	Salary	PaymentID	CourierID	LocationID	Amount	PaymentDate	EmployeeID
1	1	arnav	arnav@email.com	1112223333	Manager	50000.00	NULL	NULL	NULL	NULL	NULL	NULL
2	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	1	1	1	10000.00	2024-03-03	2
3	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	2	2	2	1500.00	2024-03-04	2
4	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	4	4	1	1500.00	2024-03-06	2
5	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	6	6	3	25000.00	2024-03-08	2
6	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	8	8	2	1200.50	2024-03-10	2
7	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	9	9	2	1200.50	2024-03-10	2
8	3	karthick	karthick@email.com	5556667777	Delivery Person	30000.00	3	3	3	1200.50	2024-03-05	3
9	3	karthick	karthick@email.com	5556667777	Delivery Person	30000.00	5	5	2	1000.00	2024-03-07	3
10	3	karthick	karthick@email.com	5556667777	Delivery Person	30000.00	7	7	1	2000.00	2024-03-09	3
11	4	Johncena	john.cena@email.com	1234567890	Manager	60000.00	NULL	NULL	NULL	NULL	NULL	NULL
12	5	Johnson	johnson@email.com	9876543210	Clerk	45000.00	NULL	NULL	NULL	NULL	NULL	NULL

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

```
select * from users cross join CourierServices
```

	UserID	Name	Email	Password	ContactNumber	Address	ServiceId	ServiceName	Cost
1	1	Ram kumar	ram.kumar@email.com	password123	8912354678	11,mothilal street Chennai	1	Standard	10.00
2	2	Rahavan	rahavan@email.com	password456	6754327689	34 Kothvari Street,Bangalore	1	Standard	10.00
3	3	Amit Patel	amit.patel@email.com	password789	7654321098	56 Krishna Lane, Hyderabad	1	Standard	10.00
4	4	Ananya Singh	ananya.singh@email.com	passwordabc	6543210987	78 Vindhya Nagar,Coimbatore	1	Standard	10.00
5	5	Sara Khan	sara.khan@email.com	passwordxyz	5432109876	90 Yamuna Road, Delhi	1	Standard	10.00
6	6	Michael Johnson	michael.johnson@email.com	password123	6547893210	23 Park Street,Mumbai	1	Standard	10.00
7	7	Ram kumar	ramkumar@email.com	password765	7896543210	45 Lake Avenue, Kolkata	1	Standard	10.00
8	8	David Lee	david.lee@email.com	password432	9876543210	67 Forest Lane, Pune	1	Standard	10.00
9	9	Sophia	sophia@email.com	password278	8765432109	89 Ocean View, Goa	1	Standard	10.00
10	1	Ram kumar	ram.kumar@email.com	password123	8912354678	11,mothilal street Chennai	2	Express	15.00
11	2	Rahavan	rahavan@email.com	password456	6754327689	34 Kothvari Street,Bangalore	2	Express	15.00
12	3	Amit Patel	amit.patel@email.com	password789	7654321098	56 Krishna Lane, Hyderabad	2	Express	15.00
13	4	Ananya Singh	ananya.singh@email.com	passwordabc	6543210987	78 Vindhya Nagar,Coimbatore	2	Express	15.00
14	5	Sara Khan	sara.khan@email.com	passwordxyz	5432109876	90 Yamuna Road, Delhi	2	Express	15.00
15	6	Michael Johnson	michael.johnson@email.com	password123	6547893210	23 Park Street,Mumbai	2	Express	15.00
16	7	Ram kumar	ramkumar@email.com	password765	7896543210	45 Lake Avenue, Kolkata	2	Express	15.00
17	8	David Lee	david.lee@email.com	password432	9876543210	67 Forest Lane, Pune	2	Express	15.00
18	9	Sophia	sophia@email.com	password278	8765432109	89 Ocean View, Goa	2	Express	15.00

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

```sql
select * from Employee cross join Location
```

	EmployeeId	Name	Email	ContactNumber	Role	Salary	LocationID	LocationName	Address
1	1	arnav	arnav@email.com	1112223333	Manager	50000.00	1	Warehouse1	789 Storage St, Chennai
2	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	1	Warehouse1	789 Storage St, Chennai
3	3	karthick	karthick@email.com	5556667777	Delivery Person	30000.00	1	Warehouse1	789 Storage St, Chennai
4	4	Johncena	john.cena@email.com	1234567890	Manager	60000.00	1	Warehouse1	789 Storage St, Chennai
5	5	Johnson	johnson@email.com	9876543210	Clerk	45000.00	1	Warehouse1	789 Storage St, Chennai
6	1	arnav	arnav@email.com	1112223333	Manager	50000.00	2	Warehouse2	456 Logistics Ave, Bangalore
7	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	2	Warehouse2	456 Logistics Ave, Bangalore
8	3	karthick	karthick@email.com	5556667777	Delivery Person	30000.00	2	Warehouse2	456 Logistics Ave, Bangalore
9	4	Johncena	john.cena@email.com	1234567890	Manager	60000.00	2	Warehouse2	456 Logistics Ave, Bangalore
10	5	Johnson	johnson@email.com	9876543210	Clerk	45000.00	2	Warehouse2	456 Logistics Ave, Bangalore
11	1	arnav	arnav@email.com	1112223333	Manager	50000.00	3	Warehouse3	123 Distribution Rd, Hyderabad
12	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00	3	Warehouse3	123 Distribution Rd, Hyderabad
13	3	karthick	karthick@email.com	5556667777	Delivery Person	30000.00	3	Warehouse3	123 Distribution Rd, Hyderabad
14	4	Johncena	john.cena@email.com	1234567890	Manager	60000.00	3	Warehouse3	123 Distribution Rd, Hyderabad
15	5	Johnson	johnson@email.com	9876543210	Clerk	45000.00	3	Warehouse3	123 Distribution Rd, Hyderabad

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

```sql
select c.*, u.* from Courier c left join Users u on c.SenderName = u.Name
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh	78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
2	2	Priya Sharma	34 Kaveri Street, Bangalore	Amit Patel	56 Krishna Lane, Hyderabad	1.80	Delivered	TN789012	2025-03-02	1	2	2
3	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma	34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
4	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar	12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
5	5	Sara Khan	90 Yamuna Road, Delhi	David Lee	67 Forest Lane, Pune	2.00	In Transit	TN234567	2025-03-04	1	2	2
6	6	Michael Johnson	23 Park Street, Mumbai	Emma Wilson	45 Lake Avenue, Kolkata	1.50	Delivered	TN345688	2025-03-05	2	3	1
7	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson	23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
8	8	David Lee	67 Forest Lane, Pune	Sara Khan	90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1
9	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan	90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

UserID	Name	Email	Password	ContactNumber	Address
NULL	NULL	NULL	NULL	NULL	NULL
NULL	NULL	NULL	NULL	NULL	NULL
3	Amit Patel	amit.patel@email.com	password789	7654321098	56 Krishna Lane, Hyderabad
4	Ananya Singh	ananya.singh@email.com	passwordabc	6543210987	78 Vindhya Nagar,Coimbatore
5	Sara Khan	sara.khan@email.com	passwordxyz	5432109876	90 Yamuna Road, Delhi
6	Michael Johnson	michael.johnson@email.com	password123	6547893210	23 Park Street,Mumbai
NULL	NULL	NULL	NULL	NULL	NULL
8	David Lee	david.lee@email.com	password432	9876543210	67 Forest Lane, Pune
NULL	NULL	NULL	NULL	NULL	NULL

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

```sql
select c.*, u.* from Courier c left join Users u ON c.ReceiverName = u.Name
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh	78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
2	2	Priya Sharma	34 Kaveri Street, Bangalore	Amit Patel	56 Krishna Lane, Hyderabad	1.80	Delivered	TN789012	2025-03-02	1	2	2
3	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma	34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
4	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar	12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
5	5	Sara Khan	90 Yamuna Road, Delhi	David Lee	67 Forest Lane, Pune	2.00	In Transit	TN234567	2025-03-04	1	2	2
6	6	Michael Johnson	23 Park Street, Mumbai	Emma Wilson	45 Lake Avenue, Kolkata	1.50	Delivered	TN345688	2025-03-05	2	3	1
7	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson	23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
8	8	David Lee	67 Forest Lane, Pune	Sara Khan	90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1
9	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan	90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

UserID	Name	Email	Password	Contact Number	Address
4	Ananya Singh	ananya.singh@email.com	passwordabc	6543210987	78 Vindhya Nagar,Coimbatore
3	Amit Patel	amit.patel@email.com	password789	7654321098	56 Krishna Lane, Hyderabad
NULL	NULL	NULL	NULL	NULL	NULL
NULL	NULL	NULL	NULL	NULL	NULL
8	David Lee	david.lee@email.com	password432	9876543210	67 Forest Lane, Pune
NULL	NULL	NULL	NULL	NULL	NULL
6	Michael Johnson	michael.johnson@email.com	password123	6547893210	23 Park Street,Mumbai
5	Sara Khan	sara.khan@email.com	passwordxyz	5432109876	90 Yamuna Road, Delhi
5	Sara Khan	sara.khan@email.com	passwordxyz	5432109876	90 Yamuna Road, Delhi

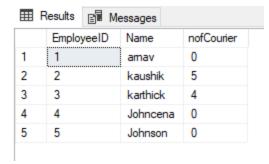## 40. Retrieve a list of couriers along with the courier service details (if available)

```
select  c.*, cs.* from Courier c left join CourierServices cs on
c.ServiceID = cs.ServiceID
```

100 %

Results | Messages

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh	78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
2	2	Priya Sharma	34 Kaveri Street, Bangalore	Amit Patel	56 Krishna Lane, Hyderabad	1.80	Delivered	TN789012	2025-03-02	1	2	2
3	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma	34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
4	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar	12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
5	5	Sara Khan	90 Yamuna Road, Delhi	David Lee	67 Forest Lane, Pune	2.00	In Transit	TN234567	2025-03-04	1	2	2
6	6	Michael Johnson	23 Park Street, Mumbai	Emma Wilson	45 Lake Avenue, Kolkata	1.50	Delivered	TN345688	2025-03-05	2	3	1
7	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson	23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
8	8	David Lee	67 Forest Lane, Pune	Sara Khan	90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1
9	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan	90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

ServiceId	ServiceName	Cost
1	Standard	10.00
2	Express	15.00
2	Express	15.00
2	Express	15.00
2	Express	15.00
1	Standard	10.00
2	Express	15.00
1	Standard	10.00
2	Express	15.00

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

```
select e.EmployeeID, e.Name, count(c.CourierID) AS nofCourier FROM Employee e
left join Courier c ON e.EmployeeID = c.EmployeeID group by e.EmployeeID, e.Name
```

Results | Messages

	EmployeeID	Name	nofCourier
1	1	arnav	0
2	2	kaushik	5
3	3	karthick	4
4	4	Johncena	0
5	5	Johnson	0

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

```
select l.LocationID, l.LocationName, sum(p.Amount) as TotalPaymentsfrom Location l
left join Payment p on l.LocationID = p.LocationID group by l.LocationID,
l.LocationName
```

	LocationID	LocationName	TotalPayments
1	1	Warehouse1	13500.00
2	2	Warehouse2	4901.00
3	3	Warehouse3	26200.50

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

```
select c1.* from Courier c1 join Courier c2 on c1.SenderName = c2.SenderName where
c1.CourierID <>c2.CourierID
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh	78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
2	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan	90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

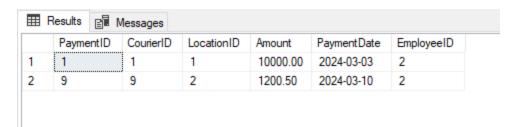### 44. List all employees who share the same role

```
select e.* from Employee e join Employee e2 on e.Role=e2.Role where
e.EmployeeId<>e2.EmployeeId
```

	EmployeeId	Name	Email	ContactNumber	Role	Salary
1	1	arnav	arnav@email.com	1112223333	Manager	50000.00
2	2	kaushik	kaushik@email.com	4445556666	Delivery Person	30000.00
3	3	karthick	karthick@email.com	5556667777	Delivery Person	30000.00
4	4	Johncena	john.cena@email.com	1234567890	Manager	60000.00

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

```
select P.* from Payment P join Courier C on P.CourierID = C.CourierID  where
C.SenderAddress like '12 Gandhi Nagar, Chennai'
```

	PaymentID	CourierID	LocationID	Amount	PaymentDate	EmployeeID
1	1	1	1	10000.00	2024-03-03	2
2	9	9	2	1200.50	2024-03-10	2

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

```
select * from Courier where SenderAddress like '12 Gandhi Nagar, Chennai'
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh	78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
2	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan	90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

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

```sql
select e.EmployeeID, e.Name, count(c.CourierID) as TotalDelivered
from Employee e
left join Courier c on e.EmployeeID = c.EmployeeID and c.Status = 'Delivered'
group by e.EmployeeID, e.Name
```

	EmployeeID	Name	TotalDelivered
1	1	arnav	0
2	2	kaushik	1
3	3	karthick	2
4	4	Johncena	0
5	5	Johnson	0

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

```sql
select c.CourierID, c.SenderName, p.Amount, cs.Cost from Courier c join Payment p on
c.CourierID = p.CourierID join CourierServices cs on c.ServiceID = cs.ServiceID
where p.Amount > cs.Cost
```

	CourierID	SenderName	Amount	Cost
1	1	Rajesh Kumar	10000.00	10.00
2	2	Priya Sharma	1500.00	15.00
3	3	Amit Patel	1200.50	15.00
4	4	Ananya Singh	1500.00	15.00
5	5	Sara Khan	1000.00	15.00
6	6	Michael Johnson	25000.00	10.00
7	7	Emma Wilson	2000.00	15.00
8	8	David Lee	1200.50	10.00
9	9	Rajesh Kumar	1200.50	15.00

Scope: Inner Queries, Non Equi Joins, Equi joins,Exist,Any,All

49. Find couriers that have a weight greater than the average weight of all couriers

```sql
select * from Courier where weight>(select avg(weight) from Courier)
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma	34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
2	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar	12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
3	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson	23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
4	8	David Lee	67 Forest Lane, Pune	Sara Khan	90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1

50. Find the names of all employees who have a salary greater than the average salary

```sql
select name from Employee where Salary >(select avg(salary) from Employee)
```

	name
1	arnav
2	Johncena
3	Johnson

51. Find the total cost of all courier services where the cost is less than the maximum cost

```sql
select sum(cost) as totalcost from CourierServices where cost < = (select max(Cost)
from CourierServices)
```

	totalcost
1	25.00

52. Find all couriers that have been paid for

```sql
select c.* from Courier c where exists (select 1 from Payment p where p.CourierID =
c.CourierID)
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	Servic
1	1	Rajesh Kumar	12 Gandhi Nagar, Chennai	Ananya Singh	78 Vindhya Nagar, Coimbatore	2.50	In Transit	TN123456	2025-03-01	1	2	1
2	2	Priya Sharma	34 Kaveri Street, Bangalore	Amit Patel	56 Krishna Lane, Hyderabad	1.80	Delivered	TN789012	2025-03-02	1	2	2
3	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma	34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
4	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar	12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
5	5	Sara Khan	90 Yamuna Road, Delhi	David Lee	67 Forest Lane, Pune	2.00	In Transit	TN234567	2025-03-04	1	2	2
6	6	Michael Johnson	23 Park Street, Mumbai	Emma Wilson	45 Lake Avenue, Kolkata	1.50	Delivered	TN345688	2025-03-05	2	3	1
7	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson	23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
8	8	David Lee	67 Forest Lane, Pune	Sara Khan	90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1
9	9	Rajesh Kumar	12 Gandhi Nagar, Chennai	Sara Khan	90 Yamuna Road, Delhi	2.80	Delivered	TN678901	2025-03-08	2	3	2

53. Find the locations where the maximum payment amount was made

```sql
select l.* from Location l where LocationID = (select top 1 LocationID
from Payment order by Amount desc)
```

	LocationID	LocationName	Address
1	3	Warehouse3	123 Distribution Rd, Hyderabad

54. Find all couriers whose weight is greater than the weight of all couriers sent by a specific sender (e.g., 'SenderName')

```sql
select * from Courier where Weight > all (select Weight from Courier
where SenderName = 'Rajesh Kumar')
```

Results | **Messages**

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	status	TrackingNumber	DeliveryDate	LocationID	EmployeeID	ServiceID
1	3	Amit Patel	56 Krishna Lane, Hyderabad	Priya Sharma	34 Kaveri Street, Bangalore	3.00	In Transit	TN345678	2025-03-03	2	3	2
2	4	Ananya Singh	78 Vindhya Nagar, Coimbatore	Rajesh Kumar	12 Gandhi Nagar, Chennai	4.00	In Transit	TN345679	2025-03-17	2	3	2
3	7	Emma Wilson	45 Lake Avenue, Kolkata	Michael Johnson	23 Park Street, Mumbai	3.50	In Transit	TN456789	2025-03-06	3	2	2
4	8	David Lee	67 Forest Lane, Pune	Sara Khan	90 Yamuna Road, Delhi	4.50	In Transit	TN567890	2025-03-07	3	2	1