

# COURIER MANAGEMENT SYSTEM

## TASK 1

### Objective:

- Design a SQL schema for a Courier Management System.
- Create tables for Customers, Couriers, Orders, and Parcels.
- Define relationships between these tables using appropriate foreign keys.
- Insert sample data into these tables.

### Tables Created:

- User
- Courier
- CourierServices
- Employee
- Location
- Payment

tables created in the data base

```
mysql> SHOW TABLES;
+-----+
| Tables_in_courier_db |
+-----+
| courier               |
| employee              |
| location              |
| payment               |
| services              |
| users                 |
+-----+
6 rows in set (0.00 sec)
```

### 1. courier table

```
mysql> SELECT * FROM courier
-> ;
```

courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id
mer_id	employee_id	location_id	service_id						
1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20	1
2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15	2
3	manoj	chennai	jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22	3
4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23	4
5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24	5
6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25	6
7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26	7
8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27	8

### 3. Employee table

mysql> DESC employee;

Field	Type	Null	Key	Default	Extra
employee_id	int	NO	PRI	NULL	
name	varchar(255)	YES		NULL	
email	varchar(255)	YES	UNI	NULL	
contact_number	varchar(20)	YES		NULL	
role	varchar(50)	YES		NULL	
salary	decimal(10,2)	YES		NULL	

4. User table

mysql> DESC users;

Field	Type	Null	Key	Default	Extra
customer_id	int	NO	PRI	NULL	auto_increment
customer_name	varchar(100)	YES		NULL	
customer_address	varchar(255)	YES		NULL	
phone_number	varchar(20)	YES		NULL	

4 rows in set (0.00 sec)

5. Services table

mysql> DESC services;

Field	Type	Null	Key	Default	Extra
service_id	int	NO	PRI	NULL	auto_increment
service_name	varchar(100)	YES		NULL	
service_type	varchar(100)	YES		NULL	
cost	decimal(10,2)	YES		NULL	

4 rows in set (0.00 sec)

6. Payment table

mysql> DESC payment;

Field	Type	Null	Key	Default	Extra
payment_id	int	NO	PRI	NULL	
courier_id	int	YES	MUL	NULL	
location_id	int	YES	MUL	NULL	
amount	decimal(10,2)	YES		NULL	
payment_date	date	YES		NULL	
employee_id	int	YES		NULL	
service_id	int	YES		NULL	

7 rows in set (0.00 sec)

7. Location table

```
mysql> DESC location;
```

Field	Type	Null	Key	Default	Extra
location_id	int	NO	PRI	NULL	
location_name	varchar(100)	YES		NULL	
address	text	YES		NULL	

3 rows in set (0.00 sec)

relationships between these tables using appropriate foreign keys

```
mysql> DESC courier;
```

Field	Type	Null	Key	Default	Extra
courier_id	int	NO	PRI	NULL	
sender_name	varchar(100)	YES		NULL	
sender_address	varchar(255)	YES		NULL	
receiver_name	varchar(100)	YES		NULL	
receiver_address	varchar(255)	YES		NULL	
weight	float	YES		NULL	
status	varchar(50)	YES		NULL	
tracking_number	varchar(50)	YES	UNI	NULL	
delivery_date	date	YES		NULL	
customer_id	int	YES	MUL	NULL	
employee_id	int	YES	MUL	NULL	
location_id	int	YES	MUL	NULL	
service_id	int	YES	MUL	NULL	

## TASK 2

### Objective:

- Perform SQL queries on the created database.

### Queries Performed:

01. List all customers.

```
mysql> SELECT sender_name FROM courier;
+-----+
| sender_name |
+-----+
| Alice       |
| Charlie     |
| manoj       |
| Tom Hardy   |
| Nancy Drew  |
| Steve Rogers|
| Bruce Wayne |
| Diana Prince|
| Peter Parker|
| Natasha Romanoff|
| Clark Kent  |
| Thor Odinson|
| subramani   |
+-----+
13 rows in set (0.00 sec)
```

02. List all orders for a specific customer.

```
mysql> SELECT * FROM courier WHERE customer_id = 1;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| courier_id | sender_name | sender_address | receiver_name | receiver_address | weight | status | tracking_number | delivery_date | customer_id |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | manoj | chennai | jeeva | elephant street | 3.5 | Delivered | TRK003 | 2025-03-22 | 1 |
| 14 | manoj | chennai | swetha | bharathi street | 4.5 | In Transit | TRK014 | 2025-03-25 | 1 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

03. List all couriers.

```
mysql> SELECT * FROM Courier;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| courier_id | sender_name | sender_address | receiver_name | receiver_address | weight | status | tracking_number | delivery_date | customer_id |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Alice | 123 Main St | Bob | 456 Elm St | 2.5 | In Transit | TRK123456 | 2025-03-20 | NULL |
| 2 | Charlie | 789 Oak St | David | 101 Pine St | 1.8 | Delivered | TRK789101 | 2025-03-15 | NULL |
| 3 | manoj | chennai | jeeva | elephant street | 3.5 | Delivered | TRK003 | 2025-03-22 | 1 |
| 4 | Tom Hardy | 56 Oak St | Emma Watson | 78 Elm Ave | 2 | In Transit | TRK004 | 2025-03-23 | 2 |
| 5 | Nancy Drew | 12 Cherry Ln | David Smith | 89 Cedar Rd | 5 | Pending | TRK005 | 2025-03-24 | 3 |
| 6 | Steve Rogers | 9 Captain St | Tony Stark | Stark Tower, NY | 10.5 | Delivered | TRK006 | 2025-03-25 | 4 |
| 7 | Bruce Wayne | Wayne Manor | Clark Kent | Daily Planet, Metropolis | 7 | In Transit | TRK007 | 2025-03-26 | 5 |
| 8 | Diana Prince | Themyscira | Barry Allen | Central City | 4.5 | Pending | TRK008 | 2025-03-27 | 6 |
| 9 | Peter Parker | 20 Queens St | Mary Jane | Brooklyn | 2.5 | Delivered | TRK009 | 2025-03-28 | 7 |
| 10 | Natasha Romanoff | Red Room | Hawkeye | Avengers Facility | 8 | Delivered | TRK010 | 2025-03-29 | 8 |
| 11 | Clark Kent | Smallville | Lois Lane | Metropolis | 1 | In Transit | TRK011 | 2025-03-30 | 9 |
| 12 | Thor Odinson | Asgard | Loki Laufeyson | Jotunheim | 6.5 | Pending | TRK012 | 2025-03-31 | 10 |
| 14 | manoj | chennai | swetha | bharathi street | 4.5 | In Transit | TRK014 | 2025-03-25 | 1 |
| 101 | subramani | mogappair wast | saravana | padi | 10 | In Transit | TRK001 | 2025-03-20 | NULL |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
14 rows in set (0.00 sec)
```

04. List all packages for a specific order.

```
mysql> SELECT * FROM courier WHERE courier_id = 3;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| courier_id | sender_name | sender_address | receiver_name | receiver_address | weight | status | tracking_number | delivery_date | customer_id |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | manoj | chennai | jeeva | elephant street | 3.5 | Delivered | TRK003 | 2025-03-22 | 1 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

05. List all deliveries for a specific courier:

```
mysql> SELECT * FROM courier WHERE status = 'Delivered' AND courier_id = 6;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| courier_id | sender_name | sender_address | receiver_name | receiver_address | weight | status | tracking_number | delivery_date | customer_id |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 6 | Steve Rogers | 9 Captain St | Tony Stark | Stark Tower, NY | 10.5 | Delivered | TRK006 | 2025-03-25 | 4 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

06. List all undelivered packages.

mysql> SELECT \* FROM courier WHERE status NOT IN ('Delivered');

courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id
1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20	NULL
4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23	2
5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24	3
7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26	5
8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27	6
11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30	9
12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31	10
14	manoj	chennai	swetha	bharathi street	4.5	In Transit	TRK014	2025-03-25	1
22	Karthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30	4
23	Nisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31	5
24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19	6
25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19	7
26	Rahul Mehta	Surat	Geeta Yadav	Noida	4.5	Pending	TRK026	2025-04-01	8
27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02	9
29	Akash Verma	Agra	Kiran Bedi	Varanasi	2.5	Pending	TRK029	2025-04-04	11
101	subramani	mogappair wast	saravana	padi	10	In Transit	TRK001	2025-03-20	NULL

16 rows in set (0.01 sec)

07. List all packages scheduled for delivery today.

mysql> SELECT \* FROM courier WHERE delivery\_date = CURDATE();

courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id
24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19	6
25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19	7

2 rows in set (0.00 sec)

08. List all packages with a specific status.

mysql> SELECT \* FROM courier WHERE status = 'In Transit';

courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id
1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20	NULL
4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23	2
7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26	5
11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30	9
14	manoj	chennai	swetha	bharathi street	4.5	In Transit	TRK014	2025-03-25	1
22	Karthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30	4
24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19	6
25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19	7
27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02	9
101	subramani	mogappair wast	saravana	padi	10	In Transit	TRK001	2025-03-20	NULL

10 rows in set (0.00 sec)

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

mysql> SELECT courier\_id, COUNT(\*) AS total\_packages FROM courier GROUP BY courier\_id;

courier_id	total_packages
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
14	1
20	1
21	1
22	1
23	1
24	1
25	1
26	1
27	1
28	1
29	1
101	1

24 rows in set (0.00 sec)

10. Find the average delivery time for each courier.

```
mysql> SELECT courier_id, AVG(DATEDIFF(delivery_date, NOW())) AS avg_delivery_time
-> FROM courier GROUP BY courier_id;
```

courier_id	avg_delivery_time
1	1.0000
2	-4.0000
3	3.0000
4	4.0000
5	5.0000
6	6.0000
7	7.0000
8	8.0000
9	9.0000
10	10.0000
11	11.0000
12	12.0000
14	6.0000
20	1.0000
21	2.0000
22	11.0000
23	12.0000
24	0.0000
25	0.0000
26	13.0000
27	14.0000
28	15.0000
29	16.0000
101	1.0000

24 rows in set (0.02 sec)

11. List all packages with a specific weight range.

```
mysql> SELECT * FROM courier WHERE weight BETWEEN 3 AND 7;
```

courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id
3	manoj	chennai	jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22	1
5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24	3
7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26	5
8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27	6
12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31	10
14	manoj	chennai	swetha	bharathi street	4.5	In Transit	TRK014	2025-03-25	1
20	Ajay Kumar	Delhi	Vijay Singh	Mumbai	3	Delivered	TRK020	2025-03-20	2
21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21	3
23	Nisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31	5
24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19	6
26	Rahul Mehta	Surat	Geeta Yadav	Noida	4.5	Pending	TRK026	2025-04-01	8
27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02	9

12 rows in set (0.00 sec)

12. Retrieve employees whose names contain 'John'.

```
mysql> SELECT * FROM employee WHERE name LIKE '%John%';
```

employee_id	name	email	contact_number	role	salary
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00

1 row in set (0.01 sec)

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

```
mysql> SELECT *
-> FROM courier c
-> JOIN payment p ON c.courier_id = p.courier_id
-> WHERE p.amount > 50;
```

	courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id	payment_id	courier_id	location_id	amount	payment_date
	1	Alice	122 Main St	Bob	856 Elm St	2.5	In Transit	TRK123456	2025-03-20	NULL	1	1	101	150.00	2025-03-21
	2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15	NULL	2	2	102	75.00	2025-03-16
	3	manoj	chennai	jeena	elephant street	3.5	Delivered	TRK003	2025-03-22						
1	3	3	103   200.00	2025-03-23											
	4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23						
2	4	4	104   90.00	2025-03-24											
	6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25						
4	6	6	106   110.00	2025-03-26											
	7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26						
5	7	7	107   60.00	2025-03-27											
	8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27						
6	8	8	108   130.00	2025-03-28											
	10	Natasha Romanoff	Red Room	Hawkeye	Avengers Facility	8	Delivered	TRK010	2025-03-29						
8	10	10	110   70.00	2025-03-30											
	11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30						
9	11	11	101   95.00	2025-03-30											
	12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31						
10	12	12	102   200.00	2025-03-31											
	20	Ajay Kumar	Delhi	Vijay Singh	Mumbai	3	Delivered	TRK020	2025-03-20						
2	13	20	103   80.00	2025-03-20											
	21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21						
3	14	21	104   55.00	2025-03-21											
	23	Nisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31						
5	16	23	106   65.00	2025-03-31											
	24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19						
6	17	24	107   95.00	2025-03-19											
	25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19						
7	18	25	108   110.00	2025-03-19											
	26	Rahul Mehta	Surat	Geeta Yadav	Woida	4.5	Pending	TRK026	2025-04-01						
8	19	26	109   120.00	2025-04-01											
	27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02						
9	20	27	110   105.00	2025-04-02											
	28	Rajesh Khanna	Chandigarh	Sundar Iyer	Mysore	1.5	Delivered	TRK028	2025-04-03						
10	21	28	101   210.00	2025-04-03											
	29	Akash Verma	Agra	Kiran Bhatt	Varanasi	2.5	Pending	TRK029	2025-04-04						
11	22	29	102   250.00	2025-04-04											
	101	subramani	mogappair wast	saravana	padi	10	In Transit	TRK001	2025-03-20	NULL	23	101	103	300.00	2025-03-20

20 rows in set (0.01 sec)

TASK 3

GroupBy, Aggregate Functions, Having, Order By, where

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

```
mysql> SELECT employee_id, COUNT(courier_id) AS total_couriers
-> FROM courier
-> GROUP BY employee_id;
```

employee_id	total_couriers
1	7
2	8
3	9

3 rows in set (0.00 sec)

15. Calculate the total revenue generated by each location

```
mysql> SELECT location_id, SUM(amount) AS total_revenue
-> FROM payment
-> GROUP BY location_id;
```

location_id	total_revenue
101	455.00
102	525.00
103	580.00
104	145.00
105	90.00
106	175.00
107	155.00
108	240.00
109	165.00
110	175.00

10 rows in set (0.00 sec)



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

```
mysql> SELECT location_id, COUNT(courier_id) AS delivered_count
-> FROM courier
-> WHERE status = 'Delivered'
-> GROUP BY location_id;
```

location_id	delivered_count
1	2
2	1
3	1
4	1
5	2
8	1

6 rows in set (0.00 sec)

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

```
mysql> SELECT employee_id, AVG(DATEDIFF(delivery_date, order_date)) AS avg_delivery_time
-> FROM courier
-> WHERE delivery_date IS NOT NULL AND order_date IS NOT NULL
-> GROUP BY employee_id
-> ORDER BY avg_delivery_time DESC
-> LIMIT 1;
```

employee_id	avg_delivery_time
1	5.0000

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

```
mysql> SELECT location_id, SUM(amount) AS total_payment
-> FROM payment
-> GROUP BY location_id
-> HAVING total_payment < 200;
```

location_id	total_payment
104	145.00
105	90.00
106	175.00
107	155.00
109	165.00
110	175.00

19. Calculate Total Payments per Location



```
mysql> SELECT location_id, SUM(amount) AS total_payments
-> FROM payment
-> GROUP BY location_id;
```

location_id	total_payments
101	455.00
102	525.00
103	580.00
104	145.00
105	90.00
106	175.00
107	155.00
108	240.00
109	165.00
110	175.00

10 rows in set (0.00 sec)

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

```
mysql> SELECT * FROM payment WHERE amount > 1000;
```

payment_id	courier_id	location_id	amount	payment_date	employee_id	service_id
101	1	NULL	1500.00	2025-03-10	NULL	NULL
102	2	NULL	1200.00	2025-03-12	NULL	NULL

2 rows in set (0.00 sec)

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

```
mysql> SELECT courier_id, SUM(amount) AS total_payment
-> FROM payment
-> WHERE payment_date > '2025-02-01'
-> GROUP BY courier_id
-> HAVING total_payments > 1000;
```

courier_id	total_payments
1	1650.00
2	1275.00

2 rows in set (0.00 sec)

## TASK 4

23. Retrieve Payments with Courier Information

mysql> SELECT p.\*, c.\*  
-> FROM payment p  
-> INNER JOIN courier c ON p.courier\_id = c.courier\_id;

payment_id	courier_id	location_id	amount	payment_date	courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id	employee_id	location_id
1	1	101	150.00	2025-03-21	1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20	NULL	1	1
2	2	102	75.00	2025-03-16	2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15	NULL	1	1
3	3	103	200.00	2025-03-23	3	wanoj	chennai	jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22	1	1	1
4	4	104	90.00	2025-03-24	4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23	2	1	2
5	5	105	50.00	2025-03-25	5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24	3	1	2
6	6	106	110.00	2025-03-26	6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25	4	2	2
7	7	107	60.00	2025-03-27	7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26	5	2	3
8	8	108	130.00	2025-03-28	8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27	6	2	3
9	9	109	45.00	2025-03-29	9	Peter Parker	28 Queens St	Mary Jane	Brooklyn	2.5	Delivered	TRK009	2025-03-28	7	2	3
10	10	110	70.00	2025-03-30	10	Natasha Romanoff	Red Room	Hawkeye	Avengers Facility	8	Delivered	TRK010	2025-03-29	8	2	4
11	11	101	95.00	2025-03-30	11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30	9	3	4
12	12	102	200.00	2025-03-31	12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31	10	3	4
13	20	103	80.00	2025-03-20	20	Ajay Kumar	Delhi	Vijsay Singh	Mumbai	3	Delivered	TRK020	2025-03-20	2	3	1
14	21	104	55.00	2025-03-21	21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21	3	3	5
15	22	105	40.00	2025-03-30	22	Marthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30	4	1	6
16	23	106	65.00	2025-03-31	23	Nisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31	5	1	6
17	24	107	95.00	2025-03-19	24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19	6	2	7
18	25	108	110.00	2025-03-19	25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19	7	2	7
19	26	109	120.00	2025-04-01	26	Rahul Mehta	Surat	Geeta Yadav	Kolkata	4.5	Pending	TRK026	2025-04-01	8	2	7
20	27	110	105.00	2025-04-02	27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02	9	3	7
21	28	101	210.00	2025-04-03	28	Rajesh Khanna	Chandigarh	Sundar Iyer	Mysore	1.5	Delivered	TRK028	2025-04-03	10	3	8
22	29	102	250.00	2025-04-04	29	Akash Verma	Agra	Miran Bedi	Varanasi	2.5	Pending	TRK029	2025-04-04	11	3	8
23	101	103	300.00	2025-03-20	101	subramani	mogappair west	saravana	padi	10	In Transit	TRK001	2025-03-20	NULL	3	8

23 rows in set (0.14 sec)

## 24. Retrieve Payments with Location Information

mysql> SELECT p.\*, l.\*  
-> FROM payment p  
-> INNER JOIN location l ON p.location\_id = l.location\_id;

payment_id	courier_id	location_id	amount	payment_date	location_id	location_name	address
1	1	101	150.00	2025-03-21	101	Chennai	Anna Nagar, Chennai
11	11	101	95.00	2025-03-30	101	Chennai	Anna Nagar, Chennai
21	21	101	210.00	2025-04-03	101	Chennai	Anna Nagar, Chennai
2	2	102	75.00	2025-03-16	102	Bangalore	MG Road, Bangalore
12	12	102	200.00	2025-03-31	102	Bangalore	MG Road, Bangalore
22	22	102	250.00	2025-04-04	102	Bangalore	MG Road, Bangalore
3	3	103	200.00	2025-03-23	103	Delhi	Connaught Place, Delhi
13	13	103	80.00	2025-03-20	103	Delhi	Connaught Place, Delhi
23	23	103	300.00	2025-03-20	103	Delhi	Connaught Place, Delhi
4	4	104	90.00	2025-03-24	104	Mumbai	Marine Drive, Mumbai
14	14	104	55.00	2025-03-21	104	Mumbai	Marine Drive, Mumbai
5	5	105	50.00	2025-03-25	105	Pune	FC Road, Pune
15	15	105	40.00	2025-03-30	105	Pune	FC Road, Pune
6	6	106	110.00	2025-03-26	106	Kolkata	Park Street, Kolkata
16	16	106	65.00	2025-03-31	106	Kolkata	Park Street, Kolkata
7	7	107	60.00	2025-03-27	107	Hyderabad	Banjara Hills, Hyderabad
17	17	107	95.00	2025-03-19	107	Hyderabad	Banjara Hills, Hyderabad
8	8	108	130.00	2025-03-28	108	Coimbatore	Gandhipuram, Coimbatore
18	18	108	110.00	2025-03-19	108	Coimbatore	Gandhipuram, Coimbatore
9	9	109	45.00	2025-03-29	109	Jaipur	MI Road, Jaipur
19	19	109	120.00	2025-04-01	109	Jaipur	MI Road, Jaipur
10	10	110	70.00	2025-03-30	110	Lucknow	Hazratganj, Lucknow
20	20	110	105.00	2025-04-02	110	Lucknow	Hazratganj, Lucknow

23 rows in set (0.01 sec)

## 25. Retrieve Payments with Courier and Location Information

mysql> SELECT p.\*, c.\*, l.\*  
-> FROM payment p  
-> INNER JOIN courier c ON p.courier\_id = c.courier\_id  
-> INNER JOIN location l ON p.location\_id = l.location\_id;

payment_id	courier_id	location_id	amount	payment_date	courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id	employee_id	location_id	location_id	location_name	address	
1	1	101	150.00	2025-03-21	1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20	NULL	1	1	1	101	Chennai	Anna Nagar, Chennai
11	11	101	95.00	2025-03-30	11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30	9	3	4	1	101	Chennai	Anna Nagar, Chennai
21	21	101	210.00	2025-04-03	28	Rajesh Khanna	Chandigarh	Sundar Iyer	Mysore	1.5	Delivered	TRK028	2025-04-03	10	3	8	1	101	Chennai	Anna Nagar, Chennai
2	2	102	75.00	2025-03-16	2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15	NULL	1	1	1	102	Bangalore	MG Road, Bangalore
12	12	102	200.00	2025-03-31	12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31	10	3	4	1	102	Bangalore	MG Road, Bangalore
22	22	102	250.00	2025-04-04	29	Akash Verma	Agra	Miran Bedi	Varanasi	2.5	Pending	TRK029	2025-04-04	11	3	8	1	102	Bangalore	MG Road, Bangalore
3	3	103	200.00	2025-03-23	3	wanoj	chennai	jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22	1	1	1	1	103	Delhi	Connaught Place, Delhi
13	13	103	80.00	2025-03-20	20	Ajay Kumar	Delhi	Vijsay Singh	Mumbai	3	Delivered	TRK020	2025-03-20	2	3	5	1	103	Delhi	Connaught Place, Delhi
23	23	103	300.00	2025-03-20	101	subramani	mogappair west	saravana	padi	10	In Transit	TRK001	2025-03-20	NULL	3	8	1	103	Delhi	Connaught Place, Delhi
4	4	104	90.00	2025-03-24	4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23	2	1	2	1	104	Mumbai	Marine Drive, Mumbai
14	14	104	55.00	2025-03-21	21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21	3	3	5	1	104	Mumbai	Marine Drive, Mumbai
5	5	105	50.00	2025-03-25	5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24	3	1	2	1	105	Pune	FC Road, Pune
15	15	105	40.00	2025-03-30	22	Marthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30	4	1	6	1	105	Pune	FC Road, Pune
6	6	106	110.00	2025-03-26	6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25	4	2	2	1	106	Kolkata	Park Street, Kolkata
16	16	106	65.00	2025-03-31	23	Nisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31	5	1	6	1	106	Kolkata	Park Street, Kolkata

## 26. List all payments with courier details

same as 23rd question

## 27. Total payments received for each courier

```
mysql> SELECT courier_id, SUM(amount) AS total_payments
-> FROM payment
-> GROUP BY courier_id;
```

courier_id	total_payments
1	150.00
2	75.00
3	200.00
4	90.00
5	50.00
6	110.00
7	60.00
8	130.00
9	45.00
10	70.00
11	95.00
12	200.00
20	80.00
21	55.00
22	40.00
23	65.00
24	95.00
25	110.00
26	120.00
27	105.00
28	210.00
29	250.00
101	300.00

23 rows in set (0.02 sec)

28. List payments made on a specific date

```
mysql> SELECT * FROM payment WHERE payment_date = '2025-03-15';
Empty set (0.01 sec)
```

```
mysql> SELECT * FROM payment WHERE payment_date = '2025-03-21';
```

payment_id	courier_id	location_id	amount	payment_date
1	1	101	150.00	2025-03-21
14	21	104	55.00	2025-03-21

2 rows in set (0.00 sec)

29. Get Courier Information for Each Payment

```
mysql> SELECT p.*, c.*
-> FROM payment p
-> LEFT JOIN courier c ON p.courier_id = c.courier_id;
```

payment_id	courier_id	location_id	amount	payment_date	courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id	employee_id	location_id
1	1	101	150.00	2025-03-21	1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-28	NULL	1	1
2	2	102	75.00	2025-03-16	2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15	NULL	1	1
3	3	103	200.00	2025-03-23	3	Manoj	chennai	Jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22	1	1	1
4	4	104	90.00	2025-03-24	4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23	2	1	2
5	5	105	50.00	2025-03-25	5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-20	3	1	2
6	6	106	110.00	2025-03-26	6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25	4	2	2
7	7	107	60.00	2025-03-27	7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26	5	2	3
8	8	108	130.00	2025-03-28	8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27	6	2	3
9	9	109	45.00	2025-03-29	9	Peter Parker	20 Queens St	Wary Jane	Brooklyn	2.5	Delivered	TRK009	2025-03-28	7	2	3
10	10	110	70.00	2025-03-30	10	Katasha Romanoff	Red Room	Hawkeye	Avengers Facility	8	Delivered	TRK010	2025-03-29	8	2	4
11	11	101	95.00	2025-03-30	11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30	9	3	4
12	12	102	200.00	2025-03-31	12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31	10	3	4
13	20	103	80.00	2025-03-30	20	Ajay Kumar	Delhi	Vijay Singh	Mumbai	3	Delivered	TRK020	2025-03-20	2	3	5
14	21	104	55.00	2025-03-21	21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21	3	3	5
15	22	105	40.00	2025-03-30	22	Marthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30	4	1	6
16	23	106	65.00	2025-03-31	23	Nisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31	5	1	6
17	24	107	95.00	2025-03-19	24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19	6	2	6
18	25	108	110.00	2025-03-19	25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19	7	2	7
19	26	109	120.00	2025-04-01	26	Rahul Mehta	Surat	Geeta Vadav	Noida	4.5	Pending	TRK026	2025-04-01	8	2	7
20	27	110	105.00	2025-04-02	27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02	9	3	7
21	28	101	210.00	2025-04-03	28	Rajesh Khanna	Chandigarh	Sundar Iyer	Mysore	1.5	Delivered	TRK028	2025-04-03	10	3	8
22	29	102	250.00	2025-04-04	29	Akash Verma	Agre	Kiran Bedi	Varanasi	2.5	Pending	TRK029	2025-04-04	11	3	8
23	101	103	300.00	2025-03-20	101	Subramani	mogappair west	saravana	padi	10	In Transit	TRK001	2025-03-20	NULL	3	8

23 rows in set (0.01 sec)

30. Get Payment Details with Location

```
mysql> SELECT p.*, l.*
-> FROM payment p
-> RIGHT JOIN location l ON p.location_id = l.location_id;
```

payment_id	courier_id	location_id	amount	payment_date	location_id	location_name	address
1	1	101	150.00	2025-03-21	101	Chennai	Anna Nagar, Chennai
11	11	101	95.00	2025-03-30	101	Chennai	Anna Nagar, Chennai
21	28	101	210.00	2025-04-03	101	Chennai	Anna Nagar, Chennai
2	2	102	75.00	2025-03-16	102	Bangalore	MG Road, Bangalore
12	12	102	200.00	2025-03-31	102	Bangalore	MG Road, Bangalore
22	29	102	250.00	2025-04-04	102	Bangalore	MG Road, Bangalore
3	3	103	200.00	2025-03-23	103	Delhi	Connaught Place, Delhi
13	20	103	80.00	2025-03-20	103	Delhi	Connaught Place, Delhi
23	101	103	300.00	2025-03-20	103	Delhi	Connaught Place, Delhi
4	4	104	90.00	2025-03-24	104	Mumbai	Marine Drive, Mumbai
14	21	104	55.00	2025-03-21	104	Mumbai	Marine Drive, Mumbai
5	5	105	50.00	2025-03-25	105	Pune	FC Road, Pune
15	22	105	40.00	2025-03-30	105	Pune	FC Road, Pune
6	6	106	110.00	2025-03-26	106	Kolkata	Park Street, Kolkata
16	23	106	65.00	2025-03-31	106	Kolkata	Park Street, Kolkata
7	7	107	60.00	2025-03-27	107	Hyderabad	Banjara Hills, Hyderabad
17	24	107	95.00	2025-03-19	107	Hyderabad	Banjara Hills, Hyderabad
8	8	108	130.00	2025-03-28	108	Coimbatore	Gandhipuram, Coimbatore
18	25	108	110.00	2025-03-19	108	Coimbatore	Gandhipuram, Coimbatore
9	9	109	45.00	2025-03-29	109	Jaipur	MI Road, Jaipur
19	26	109	120.00	2025-04-01	109	Jaipur	MI Road, Jaipur
10	10	110	70.00	2025-03-30	110	Lucknow	Hazratganj, Lucknow
20	27	110	105.00	2025-04-02	110	Lucknow	Hazratganj, Lucknow

23 rows in set (0.01 sec)

### 31. Calculating Total Payments for Each Courier

```
mysql> SELECT courier_id, SUM(amount) AS total_payments
-> FROM payment
-> GROUP BY courier_id;
```

courier_id	total_payments
1	150.00
2	75.00
3	200.00
4	90.00
5	50.00
6	110.00
7	60.00
8	130.00
9	45.00
10	70.00
11	95.00
12	200.00
20	80.00
21	55.00
22	40.00
23	65.00
24	95.00
25	110.00
26	120.00
27	105.00
28	210.00
29	250.00
101	300.00

23 rows in set (0.02 sec)

### 32. List Payments Within a Date Range

mysql> SELECT \* FROM payment WHERE payment\_date BETWEEN '2025-03-01' AND '2025-03-31';

payment_id	courier_id	location_id	amount	payment_date
1	1	101	150.00	2025-03-21
2	2	102	75.00	2025-03-16
3	3	103	200.00	2025-03-23
4	4	104	90.00	2025-03-24
5	5	105	50.00	2025-03-25
6	6	106	110.00	2025-03-26
7	7	107	60.00	2025-03-27
8	8	108	130.00	2025-03-28
9	9	109	45.00	2025-03-29
10	10	110	70.00	2025-03-30
11	11	101	95.00	2025-03-30
12	12	102	200.00	2025-03-31
13	20	103	80.00	2025-03-20
14	21	104	55.00	2025-03-21
15	22	105	40.00	2025-03-30
16	23	106	65.00	2025-03-31
17	24	107	95.00	2025-03-19
18	25	108	110.00	2025-03-19
23	101	103	300.00	2025-03-20

19 rows in set (0.01 sec)

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

mysql> SELECT u.\*, c.\*  
-> FROM users u  
-> LEFT JOIN courier c ON u.customer\_id = c.customer\_id  
-> UNION  
-> SELECT u.\*, c.\*  
-> FROM users u  
-> RIGHT JOIN courier c ON u.customer\_id = c.customer\_id;

customer_id	customer_name	customer_address	phone_number	courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id	employee_id	location_id
1	Manoj	Chennai	9876543210	3	manoj	chennai	jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22	1	1	1
1	Manoj	Chennai	9876543210	14	manoj	chennai	seetha	bharathi street	4.5	In Transit	TRK034	2025-03-25	1	3	5
2	Tom Hardy	56 Oak St	8765432109	4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23	2	1	2
2	Tom Hardy	56 Oak St	8765432109	20	Ajay Kumar	Delhi	Vijay Singh	Mumbai	3	Delivered	TRK020	2025-03-20	2	3	5
3	Nancy Drew	12 Cherry Ln	7654321098	5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24	3	1	2
3	Nancy Drew	12 Cherry Ln	7654321098	21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21	3	3	5
4	Steve Rogers	9 Captain St	6543210987	6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25	4	2	2
4	Steve Rogers	9 Captain St	6543210987	22	Warthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30	4	1	6
5	Bruce Wayne	Wayne Manor	5432109876	7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26	5	2	3
5	Bruce Wayne	Wayne Manor	5432109876	23	Risha Gupta	Lucknow	Aarjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31	5	1	6
6	Diana Prince	Themyscira	4321098765	8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27	6	2	3
6	Diana Prince	Themyscira	4321098765	24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19	6	2	6
7	Peter Parker	20 Queens St	3210987654	9	Peter Parker	20 Queens St	Mary Jane	Brooklyn	2.5	Delivered	TRK009	2025-03-28	7	2	3
7	Peter Parker	20 Queens St	3210987654	25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19	7	2	7
8	Natasha Romanoff	Red Room	2109876543	10	Natasha Romanoff	Red Room	Hawkeye	Avengers Facility	8	Delivered	TRK010	2025-03-29	8	2	4
8	Natasha Romanoff	Red Room	2109876543	26	Rahul Mehta	Surat	Geeta Yadav	Noida	4.5	Pending	TRK026	2025-04-01	8	2	7
9	Clark Kent	Smallville	1098765432	11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30	9	3	4
9	Clark Kent	Smallville	1098765432	27	Priya Sharma	Bangpur	Vikram Kumar	Ranchi	6	In Transit	TRK027	2025-04-02	9	3	7
10	Thor Odinson	Asgard	0987654321	12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31	10	3	4
10	Thor Odinson	Asgard	0987654321	28	Rajesh Khanna	Chandigarh	Sundar Iyer	Mysore	1.5	Delivered	TRK028	2025-04-03	10	3	8
11	Akash Verma	Agra	8765432101	29	Akash Verma	Agra	Kiran Bedi	Varanasi	2.5	Pending	TRK029	2025-04-04	11	3	8
12	Ajay Kumar	Delhi	9876543201	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
13	Meera Shah	Pune	8765432190	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
14	Warthik Raja	Coimbatore	7654321089	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
15	Risha Gupta	Lucknow	6543210988	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
16	Anand Sharma	Bangalore	5432109877	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
17	Sita Devi	Patna	4321098766	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
18	Rahul Mehta	Surat	3210987655	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
19	Priya Sharma	Bangpur	2109876544	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
20	Rajesh Khanna	Chandigarh	1098765433	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
NULL	NULL	NULL	NULL	1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20	NULL	1	1
NULL	NULL	NULL	NULL	2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15	NULL	1	1
NULL	NULL	NULL	NULL	101	Subramani	mogappair west	saravana	padai	10	In Transit	TRK001	2025-03-20	NULL	3	8

33 rows in set (0.00 sec)

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



```
mysql> SELECT c.*, s.*
-> FROM courier c
-> LEFT JOIN services s ON c.service_id = s.service_id
-> UNION
-> SELECT c.*, s.*
-> FROM courier c
-> RIGHT JOIN services s ON c.service_id = s.service_id;
```

courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id	employee_id	location_id	service_id	se
service_name	service_type	cost											
1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20		1	1		
NULL	NULL	NULL	NULL	NULL					NULL				
2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15		1	1		
NULL	NULL	NULL	NULL	NULL					NULL				
3	manoj	chennai	jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22	1	1			
1	NULL	NULL	NULL	NULL									
4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23		2	1	2	NULL
NULL	NULL	NULL	NULL	NULL									
5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24		3	1	2	NULL
NULL	NULL	NULL	NULL	NULL									
6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25		4	2	2	NULL
NULL	NULL	NULL	NULL	NULL									
7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26		5	2	3	NULL
NULL	NULL	NULL	NULL	NULL									
8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27		6	2	3	NULL
NULL	NULL	NULL	NULL	NULL									
9	Peter Parker	20 Queens St	Mary Jane	Brooklyn	2.5	Delivered	TRK009	2025-03-28		7	2	3	NULL
NULL	NULL	NULL	NULL	NULL									
10	Natasha Romanoff	Red Room	Hawkeye	Avengers Facility	8	Delivered	TRK010	2025-03-29		8	2	4	NULL
NULL	NULL	NULL	NULL	NULL									
11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30		9	3	4	NULL
NULL	NULL	NULL	NULL	NULL									
12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31		10	3	4	NULL
NULL	NULL	NULL	NULL	NULL									
14	manoj	chennai	swetha	bharathi street	4.5	In Transit	TRK014	2025-03-25		1	3	5	NULL
NULL	NULL	NULL	NULL	NULL									
20	Ajay Kumar	Delhi	Vijay Singh	Mumbai	3	Delivered	TRK020	2025-03-20		2	3	5	NULL
NULL	NULL	NULL	NULL	NULL									
21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21		3	3	5	NULL
NULL	NULL	NULL	NULL	NULL									
22	Karthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30		4	1	6	NULL
NULL	NULL	NULL	NULL	NULL									
23	Nisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31		5	1	6	NULL
NULL	NULL	NULL	NULL	NULL									
24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19		6	2	6	NULL
NULL	NULL	NULL	NULL	NULL									
25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19		7	2	7	NULL
NULL	NULL	NULL	NULL	NULL									
26	Rahul Mehta	Surat	Geeta Vadav	Noida	4.5	Pending	TRK026	2025-04-01		8	2	7	NULL
NULL	NULL	NULL	NULL	NULL									
27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02		9	3	7	NULL

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

```
mysql> SELECT e.*, p.*
-> FROM employee e
-> LEFT JOIN payment p ON e.employee_id = p.employee_id
-> UNION
-> SELECT e.*, p.*
-> FROM employee e
-> RIGHT JOIN payment p ON e.employee_id = p.employee_id;
```

employee_id	name	email	contact_number	role	salary	payment_id	courier_id	location_id	amount	payment_date	employee_id
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	22	29	102	250.00	2025-04-04	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	20	27	110	105.00	2025-04-02	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	18	25	108	110.00	2025-03-19	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	16	23	106	65.00	2025-03-31	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	14	21	104	55.00	2025-03-21	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	12	19	102	200.00	2025-03-31	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	10	17	110	70.00	2025-03-30	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	8	15	108	130.00	2025-03-28	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	6	13	106	110.00	2025-03-26	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	4	11	104	90.00	2025-03-24	1
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	2	9	102	75.00	2025-03-16	1
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	23	101	103	300.00	2025-03-20	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	21	99	101	210.00	2025-04-03	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	19	97	101	120.00	2025-04-01	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	17	95	107	95.00	2025-03-19	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	15	93	105	40.00	2025-03-30	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	13	91	103	80.00	2025-03-20	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	11	89	101	95.00	2025-03-30	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	9	87	109	45.00	2025-03-29	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	7	85	107	60.00	2025-03-27	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	5	83	105	50.00	2025-03-25	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	3	81	103	200.00	2025-03-23	2
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	1	79	101	150.00	2025-03-21	2
3	jeeva	rdj@example.com	9876543212	Senior Engineer	50000.00	NULL	NULL	NULL	NULL	NULL	NULL
4	mothesh	chris.evans@example.com	9876543213	Delivery Executive	35000.00	NULL	NULL	NULL	NULL	NULL	NULL
5	andrew	scarlett.j@example.com	9876543214	HR Manager	55000.00	NULL	NULL	NULL	NULL	NULL	NULL
6	manoj	tom.h@example.com	9876543215	Junior Engineer	40000.00	NULL	NULL	NULL	NULL	NULL	NULL

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

```
mysql> SELECT * FROM users CROSS JOIN services;
```

customer_id	customer_name	customer_address	phone_number	service_id	service_name	service_type	cost
1	Manoj	Chennai	9876543210	10	Return Service	Reverse Logistics	50.00
1	Manoj	Chennai	9876543210	9	Live Package Updates	Tracking	30.00
1	Manoj	Chennai	9876543210	8	Heavy Load Transport	Freight	450.00
1	Manoj	Chennai	9876543210	7	Warehouse Storage	Logistics	300.00
1	Manoj	Chennai	9876543210	6	Same-Day Delivery	Shipping	200.00
1	Manoj	Chennai	9876543210	5	Insurance Coverage	Security	75.00
1	Manoj	Chennai	9876543210	4	Package Tracking	Tracking	20.00
1	Manoj	Chennai	9876543210	3	International Shipping	Shipping	500.00
1	Manoj	Chennai	9876543210	2	Standard Delivery	Shipping	100.00
1	Manoj	Chennai	9876543210	1	Express Delivery	Shipping	150.00
2	Tom Hardy	56 Oak St	8765432109	10	Return Service	Reverse Logistics	50.00
2	Tom Hardy	56 Oak St	8765432109	9	Live Package Updates	Tracking	30.00
2	Tom Hardy	56 Oak St	8765432109	8	Heavy Load Transport	Freight	450.00
2	Tom Hardy	56 Oak St	8765432109	7	Warehouse Storage	Logistics	300.00
2	Tom Hardy	56 Oak St	8765432109	6	Same-Day Delivery	Shipping	200.00
2	Tom Hardy	56 Oak St	8765432109	5	Insurance Coverage	Security	75.00
2	Tom Hardy	56 Oak St	8765432109	4	Package Tracking	Tracking	20.00
2	Tom Hardy	56 Oak St	8765432109	3	International Shipping	Shipping	500.00
2	Tom Hardy	56 Oak St	8765432109	2	Standard Delivery	Shipping	100.00
2	Tom Hardy	56 Oak St	8765432109	1	Express Delivery	Shipping	150.00
3	Nancy Drew	12 Cherry Ln	7654321098	10	Return Service	Reverse Logistics	50.00
3	Nancy Drew	12 Cherry Ln	7654321098	9	Live Package Updates	Tracking	30.00
3	Nancy Drew	12 Cherry Ln	7654321098	8	Heavy Load Transport	Freight	450.00
3	Nancy Drew	12 Cherry Ln	7654321098	7	Warehouse Storage	Logistics	300.00
3	Nancy Drew	12 Cherry Ln	7654321098	6	Same-Day Delivery	Shipping	200.00
3	Nancy Drew	12 Cherry Ln	7654321098	5	Insurance Coverage	Security	75.00
3	Nancy Drew	12 Cherry Ln	7654321098	4	Package Tracking	Tracking	20.00
3	Nancy Drew	12 Cherry Ln	7654321098	3	International Shipping	Shipping	500.00

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

```
mysql> SELECT * FROM employee CROSS JOIN location;
```

employee_id	name	email	contact_number	role	salary	location_id	location_name	address
6	manoj	tom.h@example.com	9876543215	Junior Engineer	40000.00	101	Chennai	Anna Nagar, Chennai
5	andrew	scarlett.j@example.com	9876543214	HR Manager	55000.00	101	Chennai	Anna Nagar, Chennai
4	mothesh	chris.evans@example.com	9876543213	Delivery Executive	35000.00	101	Chennai	Anna Nagar, Chennai
3	jeeva	rdj@example.com	9876543212	Senior Engineer	50000.00	101	Chennai	Anna Nagar, Chennai
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	101	Chennai	Anna Nagar, Chennai
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	101	Chennai	Anna Nagar, Chennai
6	manoj	tom.h@example.com	9876543215	Junior Engineer	40000.00	102	Bangalore	MG Road, Bangalore
5	andrew	scarlett.j@example.com	9876543214	HR Manager	55000.00	102	Bangalore	MG Road, Bangalore
4	mothesh	chris.evans@example.com	9876543213	Delivery Executive	35000.00	102	Bangalore	MG Road, Bangalore
3	jeeva	rdj@example.com	9876543212	Senior Engineer	50000.00	102	Bangalore	MG Road, Bangalore
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	102	Bangalore	MG Road, Bangalore
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	102	Bangalore	MG Road, Bangalore
6	manoj	tom.h@example.com	9876543215	Junior Engineer	40000.00	103	Delhi	Connaught Place, Delhi
5	andrew	scarlett.j@example.com	9876543214	HR Manager	55000.00	103	Delhi	Connaught Place, Delhi
4	mothesh	chris.evans@example.com	9876543213	Delivery Executive	35000.00	103	Delhi	Connaught Place, Delhi
3	jeeva	rdj@example.com	9876543212	Senior Engineer	50000.00	103	Delhi	Connaught Place, Delhi
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	103	Delhi	Connaught Place, Delhi
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	103	Delhi	Connaught Place, Delhi
6	manoj	tom.h@example.com	9876543215	Junior Engineer	40000.00	104	Mumbai	Marine Drive, Mumbai
5	andrew	scarlett.j@example.com	9876543214	HR Manager	55000.00	104	Mumbai	Marine Drive, Mumbai
4	mothesh	chris.evans@example.com	9876543213	Delivery Executive	35000.00	104	Mumbai	Marine Drive, Mumbai
3	jeeva	rdj@example.com	9876543212	Senior Engineer	50000.00	104	Mumbai	Marine Drive, Mumbai
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	104	Mumbai	Marine Drive, Mumbai
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	104	Mumbai	Marine Drive, Mumbai
6	manoj	tom.h@example.com	9876543215	Junior Engineer	40000.00	105	Pune	FC Road, Pune
5	andrew	scarlett.j@example.com	9876543214	HR Manager	55000.00	105	Pune	FC Road, Pune
4	mothesh	chris.evans@example.com	9876543213	Delivery Executive	35000.00	105	Pune	FC Road, Pune
3	jeeva	rdj@example.com	9876543212	Senior Engineer	50000.00	105	Pune	FC Road, Pune
2	Johnny Depp	johnny.depp@example.com	9876543211	Delivery Executive	35000.00	105	Pune	FC Road, Pune
1	Subramani	bvineeth2108@gmail.com	9876543210	Manager	60000.00	105	Pune	FC Road, Pune

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

```
mysql> SELECT courier_id, sender_name, sender_address FROM courier
```

courier_id	sender_name	sender_address
1	Alice	123 Main St
2	Charlie	789 Oak St
3	manoj	chennai
4	Tom Hardy	56 Oak St
5	Nancy Drew	12 Cherry Ln
6	Steve Rogers	9 Captain St
7	Bruce Wayne	Wayne Manor
8	Diana Prince	Themyscira
9	Peter Parker	20 Queens St
10	Natasha Romanoff	Red Room
11	Clark Kent	Smallville
12	Thor Odinson	Asgard
14	manoj	chennai
20	Ajay Kumar	Delhi
21	Meera Shah	Pune
22	Karthik Raja	Coimbatore
23	Nisha Gupta	Lucknow
24	Anand Sharma	Bangalore
25	Sita Devi	Patna
26	Rahul Mehta	Surat
27	Priya Sharma	Nagpur
28	Rajesh Khanna	Chandigarh
29	Akash Verma	Agra
101	subramani	mogappair wast

24 rows in set (0.00 sec)

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



```
mysql> SELECT courier_id, receiver_name, receiver_address FROM courier;
```

courier_id	receiver_name	receiver_address
1	Bob	456 Elm St
2	David	101 Pine St
3	jeeva	elephant street
4	Emma Watson	78 Elm Ave
5	David Smith	89 Cedar Rd
6	Tony Stark	Stark Tower, NY
7	Clark Kent	Daily Planet, Metropolis
8	Barry Allen	Central City
9	Mary Jane	Brooklyn
10	Hawkeye	Avengers Facility
11	Lois Lane	Metropolis
12	Loki Laufeyson	Jotunheim
14	swetha	bharathi street
20	Vijay Singh	Mumbai
21	Rohan Patel	Ahmedabad
22	Suresh Iyer	Chennai
23	Arjun Reddy	Hyderabad
24	Deepak Jain	Kolkata
25	Ravi Kumar	Jaipur
26	Geeta Yadav	Noida
27	Vikas Kumar	Ranchi
28	Sundar Iyer	Mysore
29	Kiran Bedi	Varanasi
101	saravana	padi

24 rows in set (0.00 sec)

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

```
mysql> SELECT c.*, s.*
-> FROM courier c
-> LEFT JOIN services s ON c.service_id = s.service_id;
```

courier_id	sender_name	sender_address	receiver_name	receiver_address	weight	status	tracking_number	delivery_date	customer_id	employee_id	location_id	service_id	service_id	service_name	s
service_type	cost														
1	Alice	123 Main St	Bob	456 Elm St	2.5	In Transit	TRK123456	2025-03-20			1				
2	Charlie	789 Oak St	David	101 Pine St	1.8	Delivered	TRK789101	2025-03-15			1				
3	manoj	chennai	jeeva	elephant street	3.5	Delivered	TRK003	2025-03-22		1	1				
4	Tom Hardy	56 Oak St	Emma Watson	78 Elm Ave	2	In Transit	TRK004	2025-03-23		2	1				
5	Nancy Drew	12 Cherry Ln	David Smith	89 Cedar Rd	5	Pending	TRK005	2025-03-24		3	1				
6	Steve Rogers	9 Captain St	Tony Stark	Stark Tower, NY	10.5	Delivered	TRK006	2025-03-25		4	2				
7	Bruce Wayne	Wayne Manor	Clark Kent	Daily Planet, Metropolis	7	In Transit	TRK007	2025-03-26		5	2				
8	Diana Prince	Themyscira	Barry Allen	Central City	4.5	Pending	TRK008	2025-03-27		6	2				
9	Peter Parker	20 Queens St	Mary Jane	Brooklyn	2.5	Delivered	TRK009	2025-03-28		7	2				
10	Natasha Romanoff	Red Room	Hawkeye	Avengers Facility	8	Delivered	TRK010	2025-03-29		8	2				
11	Clark Kent	Smallville	Lois Lane	Metropolis	1	In Transit	TRK011	2025-03-30		9	3				
12	Thor Odinson	Asgard	Loki Laufeyson	Jotunheim	6.5	Pending	TRK012	2025-03-31		10	3				
14	manoj	chennai	swetha	bharathi street	4.5	In Transit	TRK014	2025-03-25		1	3				
20	Ajay Kumar	Delhi	Vijay Singh	Mumbai	3	Delivered	TRK020	2025-03-20		2	3				
21	Meera Shah	Pune	Rohan Patel	Ahmedabad	4	Delivered	TRK021	2025-03-21		3	3				
22	Karthik Raja	Coimbatore	Suresh Iyer	Chennai	2.5	In Transit	TRK022	2025-03-30		4	1				
23	Wisha Gupta	Lucknow	Arjun Reddy	Hyderabad	5.5	Pending	TRK023	2025-03-31		5	1				
24	Anand Sharma	Bangalore	Deepak Jain	Kolkata	3.2	In Transit	TRK024	2025-03-19		6	2				
25	Sita Devi	Patna	Ravi Kumar	Jaipur	2	In Transit	TRK025	2025-03-19		7	2				
26	Rahul Mehta	Surat	Geeta Yadav	Noida	4.5	Pending	TRK026	2025-04-01		8	2				
27	Priya Sharma	Nagpur	Vikas Kumar	Ranchi	6	In Transit	TRK027	2025-04-02		9	3				
28	Rajesh Khanna	Chandigarh	Sundar Iyer	Mysore	1.5	Delivered	TRK028	2025-04-03		10	3				

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

```
mysql> SELECT employee_id, COUNT(courier_id) AS total_couriers
-> FROM courier
-> GROUP BY employee_id;
```

employee_id	total_couriers
1	7
2	8
3	9

```
3 rows in set (0.01 sec)
```

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

```
mysql> SELECT location_id, SUM(amount) AS total_payments
-> FROM payment
-> GROUP BY location_id;
```

location_id	total_payments
101	455.00
102	525.00
103	580.00
104	145.00
105	90.00
106	175.00
107	155.00
108	240.00
109	165.00
110	175.00

```
10 rows in set (0.01 sec)
```

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

```
mysql> SELECT sender_name, COUNT(*) AS total_couriers
-> FROM courier
-> GROUP BY sender_name
-> HAVING COUNT(*) > 1;
```

sender_name	total_couriers
manoj	2

```
1 row in set (0.00 sec)
```

44. List all employees who share the same role.

```
mysql> SELECT role, GROUP_CONCAT(name) AS employees
-> FROM employee
-> GROUP BY role
-> HAVING COUNT(*) > 1;
```

role	employees
Delivery Executive	Johnny Depp,mothesh

```
1 row in set (0.00 sec)
```

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

```
mysql> SELECT c.sender_address, SUM(p.amount) AS total_payments
-> FROM payment p
-> JOIN courier c ON p.courier_id = c.courier_id
-> GROUP BY c.sender_address
-> HAVING COUNT(*) > 1;
```

```
Empty set (0.00 sec)
```

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

```
mysql> SELECT sender_address, COUNT(*) AS total_couriers
-> FROM courier
-> GROUP BY sender_address
-> HAVING COUNT(*) > 1;
```

```
+-----+-----+
| sender_address | total_couriers |
+-----+-----+
| chennai        |                2 |
+-----+-----+
1 row in set (0.00 sec)
```

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

```
mysql> SELECT e.employee_id, e.name AS employee_name, COUNT(c.courier_id) AS total_deliveries
-> FROM employee e
-> LEFT JOIN courier c ON e.employee_id = c.employee_id
-> WHERE c.status = 'Delivered'
-> GROUP BY e.employee_id, e.name;
```

```
+-----+-----+-----+
| employee_id | employee_name | total_deliveries |
+-----+-----+-----+
|          1 | Subramani     |                2 |
|          2 | Johnny Depp   |                3 |
|          3 | jeeva         |                3 |
+-----+-----+-----+
```

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

```
mysql> SELECT p.courier_id, p.amount AS payment_amount, s.cost AS service_cost
-> FROM payment p
-> JOIN services s ON p.service_id = s.service_id
-> WHERE p.amount > s.cost;
```

```
+-----+-----+-----+
| courier_id | payment_amount | service_cost |
+-----+-----+-----+
|          4 |          90.00 |          20.00 |
|          9 |          45.00 |          30.00 |
|         10 |          70.00 |          50.00 |
|         12 |         200.00 |         150.00 |
|         23 |          65.00 |          30.00 |
|         27 |         105.00 |          60.00 |
|         28 |         210.00 |         150.00 |
|         29 |         250.00 |         100.00 |
+-----+-----+-----+
8 rows in set (0.00 sec)
```