

ASSIGNMENT-4(HEXA)

Task-1:Database Design

By:Satyendra Singh Rathore

Design a SQL schema for a Courier Management System with tables. Define the relationships between these tables using appropriate foreign keys.

Requirements:

- Define the Database Schema • Create SQL tables for entities
- Define relationships between these tables (**one-to-many, many-to-many, etc.**).
- **Populate Sample Data** • Insert sample data into the tables to simulate real-world scenarios.

```
-- Task-1
create database CourierManagement;
use CourierManagement;

7      -- Create User table
8 • CREATE TABLE Users
9   (
L0     UserID INT PRIMARY KEY,
L1     Name VARCHAR(255),
L2     Email VARCHAR(255) UNIQUE,
L3     Password VARCHAR(255),
L4     ContactNumber VARCHAR(20),
L5     Address TEXT
L6   );
INSERT INTO users (userID, Name, Email, Password, ContactNumber, Address)
VALUES
(1, 'Aarav Sharma', 'aaravsharma@example.com', 'pass123', '+91 9876543210', '123, ABC Street, City, State, India'),
(2, 'Diya Patel', 'diyapatel@example.com', 'mypass@321', '+91 8765432109', '456, XYZ Road, City, State, India'),
(3, 'Advik Singh', 'adviks@example.com', 'securepwd!', '+91 7654321098', '789, LMN Avenue, City, State, India'),
(4, 'Anaya Mishra', 'anayam@example.com', 'p@ssAnaya', '+91 6543210987', '1011, PQR Lane, City, State, India'),
(5, 'Vihaan Reddy', 'vihaanr@example.com', 'redvihaan22', '+91 5432109876', '1213, RST Boulevard, City, State, India'),
(6, 'Ishaan Kumar', 'ishaank@example.com', 'IshaanPass123', '+91 4321098765', '1415, UVW Lane, City, State, India'),
(7, 'Aadya Gupta', 'aadyag@example.com', 'GuptaPass@7', '+91 3210987654', '1617, XYZ Street, City, State, India'),
(8, 'Riya Verma', 'riyav@example.com', 'RiyaPass123', '+91 2109876543', '1819, MNO Avenue, City, State, India'),
(9, 'Arjun Rao', 'arjunr@example.com', 'RaoArjun@99', '+91 1098765432', '2021, PQR Road, City, State, India'),
(10, 'Sara Joshi', 'saraj@example.com', 'JoshiSara@22', '+91 9876543210', '2223, ABC Street, City, State, India')
;
```

```
-- Create Courier table
CREATE TABLE Courier (
    CourierID INT PRIMARY KEY,
    SenderName VARCHAR(255),
    SenderAddress TEXT,
    ReceiverName VARCHAR(255),
    ReceiverAddress TEXT,
    Weight DECIMAL(10, 2),
    Status VARCHAR(50),
    TrackingNumber VARCHAR(20) UNIQUE,
    DeliveryDate DATE
);

INSERT INTO courier (courierID, senderName, senderAddress, receiverName, receiverAddress, weight, Status, trackingNumber, DeliveryDate)
VALUES
(1, 'Aarav Sharma', '123, ABC Street, City, State, India', 'Zara Khan', '789, LMN Avenue, City, State, India', 1.5, 'In Transit', 'TN1234567890'),
(2, 'Advik Singh', '789, LMN Avenue, City, State, India', 'Vivaan Gupta', '1011, PQR Lane, City, State, India', 2.0, 'Pending', 'TN9876543210'),
(3, 'Vihaan Reddy', '1213, RST Boulevard, City, State, India', 'Myra Patel', '1415, UVW Lane, City, State, India', 1.8, 'Delivered', 'TN3210987654'),
(4, 'Aadya Gupta', '1617, XYZ Street, City, State, India', 'Kabir Mishra', '1819, MNO Avenue, City, State, India', 2.2, 'In Transit', 'TN4567890123'),
(5, 'Arjun Rao', '2021, PQR Road, City, State, India', 'Aanya Singh', '2223, ABC Street, City, State, India', 1.6, 'Pending', 'TN3692587432'),
(6, 'Riya Verma', '1819, MNO Avenue, City, State, India', 'Advik Singh', '789, LMN Avenue, City, State, India', 1.9, 'Delivered', 'TN5432109876'),
(7, 'Sara Joshi', '2223, ABC Street, City, State, India', 'Aarav Sharma', '123, ABC Street, City, State, India', 2.5, 'In Transit', 'TN6543210987'),
(8, 'Anaya Mishra', '1011, PQR Lane, City, State, India', 'Diya Patel', '456, XYZ Road, City, State, India', 1.7, 'Pending', 'TN6543210987'),
(9, 'Ishaan Kumar', '1415, UVW Lane, City, State, India', 'Vihaan Reddy', '1213, RST Boulevard, City, State, India', 2.3, 'In Transit', 'TN4567890123'),
(10, 'Arjun Rao', '2021, PQR Road, City, State, India', 'Aadya Gupta', '1617, XYZ Street, City, State, India', 2.1, 'Delivered', 'TN4567890123');
```

```
-- Create CourierServices table
CREATE TABLE CourierServices (
    ServiceID INT PRIMARY KEY,
    ServiceName VARCHAR(100),
    Cost DECIMAL(8, 2)
);

-- Create Employee table
CREATE TABLE Employee (
    EmployeeID INT PRIMARY KEY,
    Name VARCHAR(255),
    Email VARCHAR(255) UNIQUE,
    ContactNumber VARCHAR(20),
    Role VARCHAR(50),
    Salary DECIMAL(10, 2)
);
```

```

' INSERT INTO courierservices (ServiceID, ServiceName, Cost)
VALUES
(1, 'Standard', 50.00),
(2, 'Express', 80.00),
(3, 'Priority', 100.00),
(4, 'Economy', 40.00),
(5, 'Overnight', 120.00),
(6, 'International', 150.00),
(7, 'Same-day', 200.00),
(8, 'Next-day', 90.00),
(9, 'Two-day', 60.00),
(10, 'Local', 30.00);

' INSERT INTO employee (EmployeeID, Name, Email, ContactNumber, Role, Salary)
VALUES
(1, 'Rahul Sharma', 'rahul@example.com', '+91 9876543210', 'Manager', 60000.00),
(2, 'Priya Verma', 'priya@example.com', '+91 8765432109', 'Sales Representative', 40000.00),
(3, 'Amit Singh', 'amit@example.com', '+91 7654321098', 'Marketing Coordinator', 45000.00),

```

```

-- Create Location table
CREATE TABLE Location (
    LocationID INT PRIMARY KEY,
    LocationName VARCHAR(100),
    Address TEXT
);

CREATE TABLE Payment (
    PaymentID INT PRIMARY KEY,
    CourierID INT,
    LocationID INT,
    Amount DECIMAL(10, 2),
    PaymentDate DATE,
    FOREIGN KEY (CourierID) REFERENCES Courier(CourierID),
    FOREIGN KEY (LocationID) REFERENCES Location(LocationID)
);

```

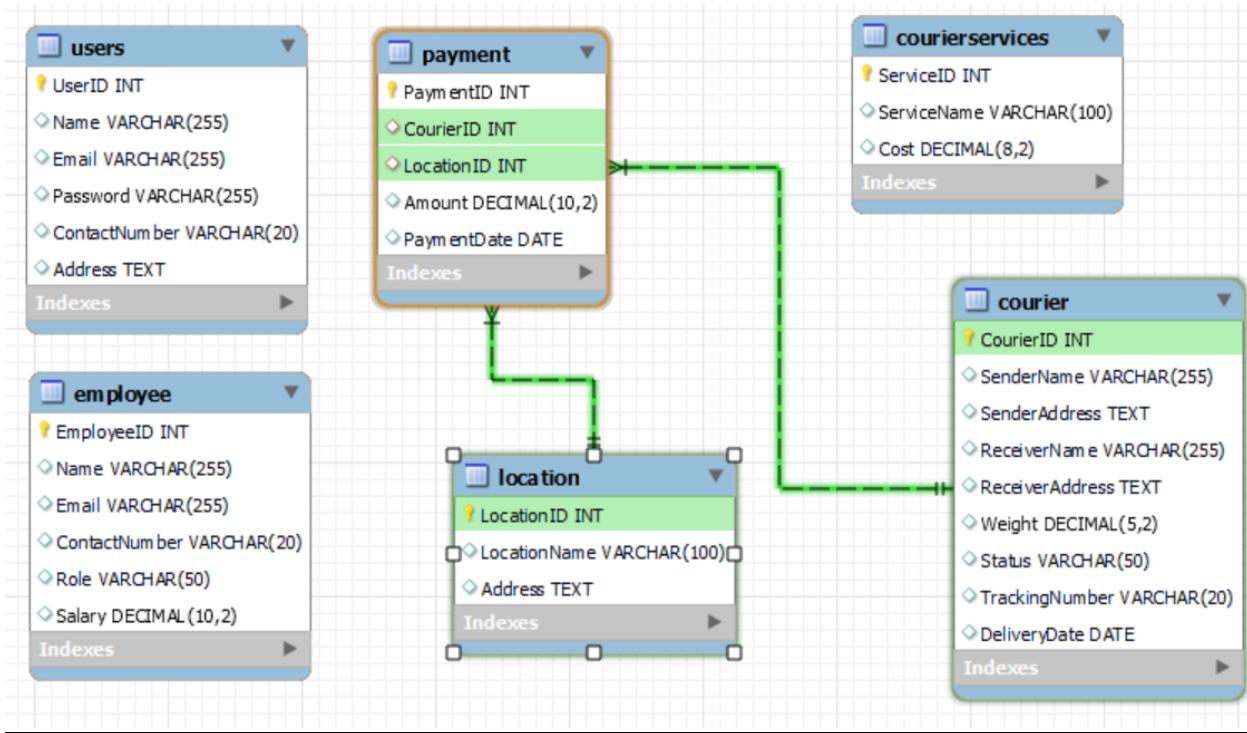
```

INSERT INTO location (LocationID, LocationName, Address)
VALUES
(1, 'Headquarters', '123, ABC Street, City, State, India'),
(2, 'Warehouse A', '456, XYZ Road, City, State, India'),
(3, 'Branch Office 1', '789, LMN Avenue, City, State, India'),
(4, 'Warehouse B', '1011, PQR Lane, City, State, India'),
(5, 'Branch Office 2', '1213, RST Boulevard, City, State, India'),
(6, 'Warehouse C', '1415, UVW Lane, City, State, India'),
(7, 'Branch Office 3', '1617, XYZ Street, City, State, India'),
(8, 'Warehouse D', '1819, MNO Avenue, City, State, India'),
(9, 'Branch Office 4', '2021, PQR Road, City, State, India'),
(10, 'Warehouse E', '2223, ABC Street, City, State, India');

INSERT INTO payment(PaymentID, CourierID, LocationID, Amount, PaymentDate)
VALUES
(1, 1, 3, 50.00, '2023-12-05'),
(2, 2, 1, 80.00, '2023-12-06'),
(3, 3, 5, 100.00, '2023-12-07'),

```

Relationship Model/ ERD:



Task-2: Select,Where

5. List all deliveries for a specific courier:
6. List all undelivered packages:
7. List all packages that are scheduled for delivery today:
8. List all packages with a specific status:
9. Calculate the total number of packages for each courier.
10. Find the average delivery time for each courier
11. List all packages with a specific weight range:
12. Retrieve employees whose names contain 'John'
13. Retrieve all courier records with payments greater than \$50.

1. List all customers:

```
138 -- 1
139 • select * from users;
1/10
```

Result Grid | Filter Rows: [] | Edit: [] | Export/Import: [] | Wrap Cell Content: []

UserID	Name	Email	Password	ContactNumber	Address
1	Aarav Sharma	aaravsharma@example.com	pass123	+91 9876543210	123, ABC Street, City, State, India
2	Diya Patel	diyapatel@example.com	mypass@321	+91 8765432109	456, XYZ Road, City, State, India
3	Advik Singh	adviks@example.com	securepwd!	+91 7654321098	789, LMN Avenue, City, State, India
4	Anaya Mishra	anayam@example.com	p@ssAnaya	+91 6543210987	1011, PQR Lane, City, State, India
5	Vishaan Reddy	vishaanr@example.com	redvishaan22	+91 5432109876	1213, RST Boulevard, City, State, India

2. List all orders for a specific customer:

```
141 -- 2
142 • select * from Courier where SenderName='Advik Singh';
1/13
```

Result Grid | Filter Rows: [] | Edit: [] | Export/Import: [] | Wrap Cell Content: []

CourierID	SenderId	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
2	NULL	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
*				NULL	NULL	NULL	NULL	NULL	NULL

3. List all couriers:

```
144 -- 3
145 • select * from Courier;
1/16
```

Result Grid | Filter Rows: [] | Edit: [] | Export/Import: [] | Wrap Cell Content: []

CourierID	SenderId	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
1	NULL	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India	1.50	In Transit	TN123456789	2023-12-15
2	NULL	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
3	NULL	Vishaan Reddy	1213, RST Boulevard, City, State, India	Myra Patel	1415, UVW Lane, City, State, India	1.80	Delivered	TN246813579	2023-12-17
4	NULL	Aadya Gupta	1617, XYZ Street, City, State, India	Kabi Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18
5	NULL	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19

4. List all packages for a specific order:

```
147 -- 4  
148 • select * from Courier where CourierID=8;  
149
```

Result Grid Filter Rows: [] Edit: [] Export/Import: [] Wrap Cell Content: []									
CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	
8	Anaya Mishra	1011, PQR Lane, City, State, India	Diya Patel	456, XYZ Road, City, State, India	1.70	Pending	TN654321987	2023-12-22	

5. List all deliveries for a specific courier:

```
150 -- 5  
151 • select * from Courier where CourierID=4;
```

Result Grid Filter Rows: [] Edit: [] Export/Import: [] Wrap Cell Content: []									
CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	
4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18	

6. List all undelivered packages:

```
153 -- 6  
154 • select * from Courier where status<>'Delivered';  
155
```

Result Grid Filter Rows: [] Edit: [] Export/Import: [] Wrap Cell Content: []									
CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	
1	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India	1.50	In Transit	TN123456789	2023-12-15	
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16	
4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18	
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19	
7	Sara Joshi	2223, ABC Street, City, State, India	Aarav Sharma	123, ABC Street, City, State, India	2.50	In Transit	TN987654322	2023-12-21	

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

```
156 -- 7  
157 • select * from Courier where DeliveryDate= '2023-12-19';  
158
```

Result Grid Filter Rows: [] Edit: [] Export/Import: [] Wrap Cell Content: []									
CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	
1	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India	1.50	In Transit	TN123456789	2023-12-15	
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16	
4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18	
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19	
7	Sara Joshi	2223, ABC Street, City, State, India	Aarav Sharma	123, ABC Street, City, State, India	2.50	In Transit	TN987654322	2023-12-21	

8. List all packages with a specific status:

```
159 -- 8
160 • select * from Courier where status='Pending';
```

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19
8	Anaya Mishra	1011, PQR Lane, City, State, India	Diya Patel	456, XYZ Road, City, State, India	1.70	Pending	TN654321987	2023-12-22

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

```
162 -- 9
163 • select CourierID,Count(*) as total_Packages from Courier group by CourierID;
```

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19
8	Anaya Mishra	1011, PQR Lane, City, State, India	Diya Patel	456, XYZ Road, City, State, India	1.70	Pending	TN654321987	2023-12-22

10. Find the average delivery time for each courier

```
165 -- 10
166 • SELECT CourierID, AVG(DATEDIFF(DeliveryDate, CURDATE())) AS AvgDeliveryTime
167   FROM courier
168 GROUP BY CourierID;
```

CourierID	AvgDeliveryTime
1	3.0000
2	4.0000
3	5.0000
4	6.0000
5	7.0000

11. List all packages with a specific weight range:

```
170 -- 11
171 • select * from Courier where Weight between 2.0 and 3.0;
172
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18
7	Sara Joshi	2223, ABC Street, City, State, India	Aarav Sharma	123, ABC Street, City, State, India	2.50	In Transit	TN987654322	2023-12-21
9	Ishaan Kumar	1415, UVW Lane, City, State, India	Vihaan Reddy	1213, RST Boulevard, City, State, India	2.30	In Transit	TN123987456	2023-12-23
10	Arjun Rao	2021, PQR Road, City, State, India	Aadya Gupta	1617, XYZ Street, City, State, India	2.10	Delivered	TN456789123	2023-12-24

12. Retrieve employees whose names contain 'Sharma'

```
173 -- 12
174 • select * from Employee where Name Like '%Sharma%';
175
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18
7	Sara Joshi	2223, ABC Street, City, State, India	Aarav Sharma	123, ABC Street, City, State, India	2.50	In Transit	TN987654322	2023-12-21
9	Ishaan Kumar	1415, UVW Lane, City, State, India	Vihaan Reddy	1213, RST Boulevard, City, State, India	2.30	In Transit	TN123987456	2023-12-23
10	Arjun Rao	2021, PQR Road, City, State, India	Aadya Gupta	1617, XYZ Street, City, State, India	2.10	Delivered	TN456789123	2023-12-24

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

```
176 -- 13
177 • select c.* from Courier c inner join Payment p on c.CourierID=p.CourierID where p.amount>50;
178
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
3	Vihaan Reddy	1213, RST Boulevard, City, State, India	Myra Patel	1415, UVW Lane, City, State, India	1.80	Delivered	TN246813579	2023-12-17
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19
6	Riya Verma	1819, MNO Avenue, City, State, India	Advik Singh	789, LMN Avenue, City, State, India	1.90	Delivered	TN579312468	2023-12-20
7	Sara Joshi	2223, ABC Street, City, State, India	Aarav Sharma	123, ABC Street, City, State, India	2.50	In Transit	TN987654322	2023-12-21

Task 3: GroupBy, Aggregate Functions, Having, Order By, where

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

```
180      -- Task-3
181
182      -- 1
183 •  select employeeID, Name, Count(CourierID) as TotalCourierHandeled
184      from employee
185      left join Courier on employee.EmployeeID=Courier.CourierID
186      group by employee.EmployeeID,employee.Name;
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The grid itself has three columns: 'employeeID', 'Name', and 'TotalCourierHandeled'. There are five rows of data, each with a small triangle icon to its left:

	employeeID	Name	TotalCourierHandeled
▶	1	Rahul Sharma	1
	2	Priya Verma	1
	3	Amit Singh	1
	4	Kavita Reddy	1
	5	Neha Patel	1

15. Calculate the total revenue generated by each location

```
188      -- 2
189 •  select l.locationID,l.locationName,sum(p.amount) as TotalRevenue
190      from location l
191      left join payment p on l.locationID=p.locationID
192      group by l.locationID,l.LocationName;
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The grid itself has three columns: 'locationID', 'locationName', and 'TotalRevenue'. There are five rows of data, each with a small triangle icon to its left:

	locationID	locationName	TotalRevenue
▶	1	Headquarters	80.00
	2	Warehouse A	40.00
	3	Branch Office 1	50.00
	4	Warehouse B	150.00
	5	Branch Office 2	100.00

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

```
194    -- 3
195 •  select l.locationID,l.locationName, count(c.CourierID) as TotalCouriersDelievered
196    from location l
197    left join payment p on l.locationID=p.locationID
198    left join Courier c on p.courierID=c.CourierID
199    where c.status='Delivered'
200    group by l.locationID,l.LocationName;
```

201

Result Grid			
	locationID	locationName	TotalCouriersDelievered
▶	5	Branch Office 2	1
	4	Warehouse B	1
	8	Warehouse D	1

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

```
202    -- 4
203 •  select l.locationID,l.locationName,sum(p.amount) as totalPayment
204    from location l
205    join payment p on l.locationID=p.locationID
206    group by l.locationID,l.locationName
207    having sum(p.amount)<100;
208
```

Result Grid			
	locationID	locationName	totalPayment
▶	1	Headquarters	80.00
	2	Warehouse A	40.00
	3	Branch Office 1	50.00
	6	Warehouse C	60.00
	8	Warehouse D	30.00

18. Calculate Total Payments per Location

```
209 -- 5
210 • select l.locationID,l.locationName, coalesce(sum(p.amount),0) as totalPayment
211   from location l
212   join payment p on l.locationID=p.locationID
213   group by l.locationID,l.locationName;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	locationID	locationName	totalPayment
▶	1	Headquarters	80.00
	2	Warehouse A	40.00
	3	Branch Office 1	50.00
	4	Warehouse B	150.00
	5	Branch Office 2	100.00

19. Retrieve couriers who have received payments totaling more than \$1000 in a specific location

```
215 -- 6
216 • select c.* from Courier c
217 join payment p on c.courierID=p.courierID
218 join location l on p.locationID=l.locationID
219 where p.amount>100 and l.locationID =4;
```

Result Grid								
		Filter Rows:		Export:		Wrap Cell Content:		
CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
6	Riya Verma	1819, MNO Avenue, City, State, India	Advik Singh	789, LMN Avenue, City, State, India	1.90	Delivered	TN579312468	2023-12-20

20. Retrieve couriers who have received payments totaling more than \$1000 after a certain date

```
221      -- 7
222 •  select c.* from Courier c
223   join payment p on c.courierID=p.courierID
224   where p.amount>1000 and p.PaymentDate>'2023-12-06';
225
```

Shipment Details									
Result Grid		Filter Rows:	Export:	Wrap Cell Content:					
CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	
1	FEDEX	123 Main St, Anytown, USA	JANE DOW	456 Elm St, Anytown, USA	5.0	Pending	1234567890	2023-10-15	

21. Retrieve locations where the total amount received is more than 5000\$ before a certain date.

```
227 • select l.locationID, l.locationName  
228   from location l  
229   join payment p on l.locationID=p.locationID  
230   where p.paymentDate<'2023-12-06'  
231   group by l.locationID,l.locationName  
232   having (sum(p.amount))>5000;  
233
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:	
locationID	locationName			

Task 4: Inner Join, Full Outer Join, Cross Join, Left Outer Join, Right Outer Join

22. Retrieve Payments with Courier Information.

```
234   -- Task -4  
235  
236   -- 1  
237 • select * from payment  
238   join courier c on c.courierID=payment.paymentID;
```

PaymentID	CourierID	LocationID	Amount	PaymentDate	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress
1	1	3	50.00	2023-12-05	1	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India
2	2	1	80.00	2023-12-06	2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India
3	3	5	100.00	2023-12-07	3	Vihaan Reddy	1213, RST Boulevard, City, State, India	Myra Patel	1415, UVW Lane, City, State, India
4	4	2	40.00	2023-12-08	4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India
5	5	7	120.00	2023-12-09	5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India
6	6	4	150.00	2023-12-10	6	Riva Verma	1819, MNO Avenue, City, State, India	Advik Singh	789, LMN Avenue, City, State, India

23. Retrieve payments with location information

```
240   -- 2  
241 • select * from payment  
242   join location l on l.locationID=payment.locationID;
```

PaymentID	CourierID	LocationID	Amount	PaymentDate	LocationID	LocationName	Address
1	1	3	50.00	2023-12-05	3	Branch Office 1	789, LMN Avenue, City, State, India
2	2	1	80.00	2023-12-06	1	Headquarters	123, ABC Street, City, State, India
3	3	5	100.00	2023-12-07	5	Branch Office 2	1213, RST Boulevard, City, State, India
4	4	2	40.00	2023-12-08	2	Warehouse A	456, XYZ Road, City, State, India
5	5	7	120.00	2023-12-09	7	Branch Office 3	1617, XYZ Street, City, State, India
6	6	4	150.00	2023-12-10	4	Warehouse B	1011, PQR Lane, City, State, India
7	7	10	200.00	2023-12-11	10	Warehouse E	2223, ABC Street, City, State, India

Result 96 ×

24. Retrieve payments with courier and location information.

```
244    -- 3
245 •  select * from payment p
246   join location l on l.locationID=p.locationID
247   join courier c on c.courierID=p.paymentID;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	PaymentID	CourierID	LocationID	Amount	PaymentDate	LocationID	LocationName	Address	CourierID	SenderName	SenderAddress
▶	1	1	3	50.00	2023-12-05	3	Branch Office 1	789, LMN Avenue, City, State, India	1	Aarav Sharma	123, ABC Street, City
	2	2	1	80.00	2023-12-06	1	Headquarters	123, ABC Street, City, State, India	2	Advik Singh	789, LMN Avenue, Ci
	3	3	5	100.00	2023-12-07	5	Branch Office 2	1213, RST Boulevard, City, State, India	3	Vishaan Reddy	1213, RST Boulevard
	4	4	2	40.00	2023-12-08	2	Warehouse A	456, XYZ Road, City, State, India	4	Aadya Gupta	1617, XYZ Street, Cl
	5	5	7	120.00	2023-12-09	7	Branch Office 3	1617, XYZ Street, City, State, India	5	Arjun Rao	2021, PQR Road, Ct
	6	6	4	150.00	2023-12-10	4	Warehouse B	1011, POR Lane, City. State. India	6	Riya Verma	1819, MNO Avenue,

Result 97 ×

25. List all payments with courier details.

```
249    -- 4
250 •  select * from payment p
251   join courier c on c.courierID=p.paymentID;
252
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	PaymentID	CourierID	LocationID	Amount	PaymentDate	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress
▶	1	1	3	50.00	2023-12-05	1	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India
	2	2	1	80.00	2023-12-06	2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India
	3	3	5	100.00	2023-12-07	3	Vishaan Reddy	1213, RST Boulevard, City, State, India	Myra Patel	1415, UVW Lane, City, State, India
	4	4	2	40.00	2023-12-08	4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, Indi
	5	5	7	120.00	2023-12-09	5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India
	6	6	4	150.00	2023-12-10	6	Riya Verma	1819, MNO Avenue. Civt. State. India	Advik Singh	789, LMN Avenue. Civt. State. India

26. Total payments received for each courier

```
253    -- 5
254 •  select c.courierID,c.senderName,sum(p.amount) as totalpayment
255   from courier c
256   join payment p on c.courierID=p.paymentID
257   group by c.courierID, c.senderName;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	courierID	senderName	totalpayment
▶	1	Aarav Sharma	50.00
	2	Advik Singh	80.00
	3	Vishaan Reddy	100.00
	4	Aadya Gupta	40.00
	5	Arjun Rao	120.00
	6	Riya Verma	150.00
	7	Sara Joshi	200.00

27. List payments made on specific date.

```
259    -- 6
260 •  select * from payment
261   where paymentDate='2023-12-06';
262
```

Result Grid					
	PaymentID	CourierID	LocationID	Amount	PaymentDate
▶	2	2	1	80.00	2023-12-06
*	HULL	HULL	HULL	HULL	HULL

27. Get courier information for each payment.

```
263    -- 7
264 •  select paymentID,paymentDate,c.*
265   from payment p
266   left join courier c on c.courierID=p.courierID;
```

Result Grid										
paymentID	paymentDate	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	Tracking	
1	2023-12-05	1	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India	1.50	In Transit	TN12345	
2	2023-12-06	2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN98765	
3	2023-12-07	3	Vihaan Reddy	1213, RST Boulevard, City, State, India	Myra Patel	1415, UVW Lane, City, State, India	1.80	Delivered	TN24681	
4	2023-12-08	4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN13579	
5	2023-12-09	5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN36925	
6	2023-12-10	6	Riva Verma	1819, MNO Avenue, City, State, India	Advik Singh	789, LMN Avenue, City, State, India	1.90	Delivered	TN57931	

28. Get payment details with location.

```
268    -- 8
269 •  select p.* ,l.*
270   from payment p
271   left join location l on p.locationID=l.locationID;
272
```

Result Grid								
	PaymentID	CourierID	LocationID	Amount	PaymentDate	LocationID	LocationName	Address
▶	1	1	3	50.00	2023-12-05	3	Branch Office 1	789, LMN Avenue, City, State, India
2	2	2	1	80.00	2023-12-06	1	Headquarters	123, ABC Street, City, State, India
3	3	5	5	100.00	2023-12-07	5	Branch Office 2	1213, RST Boulevard, City, State, India
4	4	2	2	40.00	2023-12-08	2	Warehouse A	456, XYZ Road, City, State, India
5	5	7	7	120.00	2023-12-09	7	Branch Office 3	1617, XYZ Street, City, State, India
6	6	4	4	150.00	2023-12-10	4	Warehouse B	1011, PQR Lane, City, State, India
7	7	10	10	200.00	2023-12-11	10	Warehouse E	2223, ABC Street, City, State, India

29. Calculating total payment for each courier.

```
273    -- 9
274 •  select c.courierID,c.senderName,sum(p.amount) as totalpayment
275    from courier c
276    join payment p on c.courierID=p.paymentID
277    group by c.courierID, c.senderName;
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The grid has three columns: 'courierID', 'senderName', and 'totalpayment'. The data is as follows:

	courierID	senderName	totalpayment
▶	1	Aarav Sharma	50.00
	2	Advik Singh	80.00
	3	Vihaan Reddy	100.00
	4	Aadya Gupta	40.00
	5	Arjun Rao	120.00
	6	Riya Verma	150.00
	7	Sara Joshi	200.00

30. List payments within a date range.

```
279    -- 10
280 •  select * from payment
281      where paymentDate between '2023-12-01' and '2023-12-31';
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Edit', 'Export/Import', and other options. The grid has six columns: 'PaymentID', 'CourierID', 'LocationID', 'Amount', and 'PaymentDate'. The data is as follows:

	PaymentID	CourierID	LocationID	Amount	PaymentDate
▶	1	1	3	50.00	2023-12-05
	2	2	1	80.00	2023-12-06
	3	3	5	100.00	2023-12-07
	4	4	2	40.00	2023-12-08
	5	5	7	120.00	2023-12-09
	6	6	4	150.00	2023-12-10
	7	7	10	200.00	2023-12-11

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

```
283    -- 11
284 •  select u.* , cs.*
285   from users u
286   cross join courierservices cs;
287
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The grid has columns: UserID, Name, Email, Password, ContactNumber, Address, ServiceID, ServiceName, and Cost. The data consists of 10 rows, each representing a user and their corresponding service information. The 'ServiceID' column is consistently 1, and the 'Cost' column is 50.00.

	UserID	Name	Email	Password	ContactNumber	Address	ServiceID	ServiceName	Cost
▶	10	Sara Joshi	saraj@example.com	JoshiSara@22	+91 9876543210	2223, ABC Street, City, State, India	1	Standard	50.00
	9	Arjun Rao	arjunr@example.com	RaoArjun@99	+91 1098765432	2021, PQR Road, City, State, India	1	Standard	50.00
	8	Riya Verma	riyav@example.com	RiyaPass123	+91 2109876543	1819, MNO Avenue, City, State, India	1	Standard	50.00
	7	Aadya Gupta	aadyag@example.com	GuptaPass@7	+91 3210987654	1617, XYZ Street, City, State, India	1	Standard	50.00
	6	Ishaan Kumar	ishaank@example.com	IshaanPass123	+91 4321098765	1415, UVW Lane, City, State, India	1	Standard	50.00
	5	Vihaan Reddy	vihaanr@example.com	redivihaan22	+91 5432109876	1213, RST Boulevard, City, State, India	1	Standard	50.00
	4	Anaya Mishra	anavam@example.com	o@ssAnava	+91 6543210987	1011, POR Lane, City, State, India	1	Standard	50.00
	Result 105 ×								

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

```
288    -- 12
289 •  select courierID, senderName, senderAddress from courier;
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The grid has columns: courierID, senderName, and senderAddress. The data consists of 10 rows, each representing a courier and their corresponding sender information. The 'senderAddress' column contains various addresses across different cities and states.

	courierID	senderName	senderAddress
▶	1	Aarav Sharma	123, ABC Street, City, State, India
	2	Advik Singh	789, LMN Avenue, City, State, India
	3	Vihaan Reddy	1213, RST Boulevard, City, State, India
	4	Aadya Gupta	1617, XYZ Street, City, State, India
	5	Arjun Rao	2021, PQR Road, City, State, India
	6	Riya Verma	1819, MNO Avenue, City, State, India
	7	Sara Joshi	2223, ABC Street, City, State, India
	8	Anaya Mishra	1011, POR Lane, City, State, India
	9	Ishaan Kumar	1415, UVW Lane, City, State, India
	courier 106 ×		

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

```
291      -- 13
292 •   select courierID,receiverName,receiverAddress from courier;
293
```

	courierID	receiverName	receiverAddress
▶	1	Zara Khan	789, LMN Avenue, City, State, India
	2	Vivaan Gupta	1011, PQR Lane, City, State, India
	3	Myra Patel	1415, UVW Lane, City, State, India
	4	Kabir Mishra	1819, MNO Avenue, City, State, India
	5	Aanya Singh	2223, ABC Street, City, State, India
	6	Advik Singh	789, LMN Avenue, City, State, India
	7	Aarav Sharma	123, ABC Street, City, State, India
	8	Diya Patel	456, XYZ Road, City, State, India
	9	Vihaan Reddy	1213, RST Boulevard, City, State, India

35. Retrieve a list of couriers along with the courier service details.

```
294      -- 14
295 •   select c.* ,cs.*
296   from courier c
297   join courierservices cs on c.courierID=cs.serviceID;
```

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	ServiceID
▶	1	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India	1.50	In Transit	TN123456789	2023-12-15	1
	2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16	2
	3	Vihaan Reddy	1213, RST Boulevard, City, State, India	Myra Patel	1415, UVW Lane, City, State, India	1.80	Delivered	TN246813579	2023-12-17	3
	4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18	4
	5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19	5
	6	Riya Verma	1819, MNO Avenue, City, State, India	Advik Singh	789, LMN Avenue, City, State, India	1.90	Delivered	TN579312468	2023-12-20	6
	7	Sara Joshi	2223, ABC Street, City, State, India	Aarav Sharma	123, ABC Street, City, State, India	2.50	In Transit	TN987654322	2023-12-21	7
	8	Anaya Mishra	1011, PQR Lane, City, State, India	Diya Patel	456, XYZ Road, City, State, India	1.70	Pending	TN654321987	2023-12-22	8

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

```
299      -- 15
300 •  select e.employeeID,e.name as empName, count(courierID) as courier_assigned
301   from employee e
302   left join courier c on e.employeeID=c.courierID
303   group by e.employeeID,e.name;
```

The screenshot shows a MySQL query results window with the following details:

- Result Grid**: The data is presented in a grid format.
- Columns**: The columns are labeled `employeeID`, `empName`, and `courier_assigned`.
- Data**: There are 9 rows of data, all showing a value of 1 for `courier_assigned`. The employees listed are Rahul Sharma, Priya Verma, Amit Singh, Kavita Reddy, Neha Patel, Ravi Kumar, Sneha Gupta, Aryan Sharma, and Pooja Mishra.

	employeeID	empName	courier_assigned
▶	1	Rahul Sharma	1
	2	Priya Verma	1
	3	Amit Singh	1
	4	Kavita Reddy	1
	5	Neha Patel	1
	6	Ravi Kumar	1
	7	Sneha Gupta	1
	8	Aryan Sharma	1
	9	Pooja Mishra	1

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

```
305      -- 16
306 •  select l.locationId,l.locationName,sum(p.amount) as totalPayment
307   from location l
308   left join payment p on l.locationID=p.locationID
309   group by l.locationID,l.locationName;
```

The screenshot shows a MySQL query results window with the following details:

- Result Grid**: The data is presented in a grid format.
- Columns**: The columns are labeled `locationId`, `locationName`, and `totalPayment`.
- Data**: There are 9 rows of data. The locations and their total payments are: Headquarters (80.00), Warehouse A (40.00), Branch Office 1 (50.00), Warehouse B (150.00), Branch Office 2 (100.00), Warehouse C (60.00), Branch Office 3 (120.00), Warehouse D (30.00), and Branch Office 4 (90.00).

	locationId	locationName	totalPayment
▶	1	Headquarters	80.00
	2	Warehouse A	40.00
	3	Branch Office 1	50.00
	4	Warehouse B	150.00
	5	Branch Office 2	100.00
	6	Warehouse C	60.00
	7	Branch Office 3	120.00
	8	Warehouse D	30.00
	9	Branch Office 4	90.00

38. Retrieve all couriers sent by the same sender.

```
311    -- 17
312 •  SELECT c1.*
313   FROM courier c1
314  JOIN courier c2 ON c1.senderName = c2.senderName
315 WHERE c2.CourierID <> c1.CourierID;
```

The screenshot shows a 'Result Grid' window with the following columns: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, and DeliveryDate. The data is as follows:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
10	Arjun Rao	2021, PQR Road, City, State, India	Aadya Gupta	1617, XYZ Street, City, State, India	2.10	Delivered	TN456789123	2023-12-24
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19

39. List all employees who share the same role.

```
317    -- 18
318 •  SELECT e1.*
319   FROM employee e1
320  JOIN employee e2 ON e1.Role = e2.Role
321 WHERE e1.EmployeeID <> e2.EmployeeID
322 ORDER BY e1.Role, e1.EmployeeID;
```

The screenshot shows a 'Result Grid' window with the following columns: EmployeeID, Name, Email, ContactNumber, Role, and Salary. The data is as follows:

EmployeeID	Name	Email	ContactNumber	Role	Salary
1	Rahul Sharma	rahul@example.com	+91 9876543210	Manager	60000.00
11	Shanvi Rathore	sahnvi@example.com	+91 1234567890	Manager	90000.00

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

```
324    -- 19
325 •  SELECT c1.*
326   FROM courier c1
327  JOIN courier c2 ON c1.SenderAddress = c2.SenderAddress
328 WHERE c1.CourierID <> c2.CourierID
329 ORDER BY c1.SenderAddress, c1.CourierID;
```

The screenshot shows a 'Result Grid' window with the following columns: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, and DeliveryDate. The data is as follows:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19
10	Arjun Rao	2021, PQR Road, City, State, India	Aadya Gupta	1617, XYZ Street, City, State, India	2.10	Delivered	TN456789123	2023-12-24

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

```
331      -- 20
332 •  SELECT e.EmployeeID, e.Name, COUNT(c.CourierID) AS DeliveredCouriers
333   FROM employee e
334   LEFT JOIN courier c ON e.Name = c.ReceiverName
335 GROUP BY e.EmployeeID, e.Name
336 ORDER BY e.EmployeeID;
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The grid itself has three columns: EmployeeID, Name, and DeliveredCouriers. The data shows 9 rows, each with EmployeeID, Name, and a value of 0 in the DeliveredCouriers column. The names listed are Rahul Sharma, Priya Verma, Amit Singh, Kavita Reddy, Neha Patel, Ravi Kumar, Sneha Gupta, Aryan Sharma, and Pooja Mishra.

	EmployeeID	Name	DeliveredCouriers
▶	1	Rahul Sharma	0
	2	Priya Verma	0
	3	Amit Singh	0
	4	Kavita Reddy	0
	5	Neha Patel	0
	6	Ravi Kumar	0
	7	Sneha Gupta	0
	8	Aryan Sharma	0
	9	Pooja Mishra	0

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

```
338      -- 21
339 •  SELECT c.*
340   FROM courier c
341   JOIN payment p ON c.CourierID = p.CourierID
342   JOIN courierservices cs ON c.CourierID = cs.ServiceID
343 WHERE p.Amount > cs.Cost;
```

The screenshot shows a database query results grid. At the top, there are buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The grid has ten columns: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, and DeliveryDate. The data shows 9 rows, each corresponding to a courier with their respective details. The 'Status' column contains values like 'Shipped', 'Delivered', and 'In Progress'.

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
▶	1	Shivam Logistics	123 Main St, New York	John Doe	456 Elm St, Los Angeles	10.5	In Progress	TRK-12345	2023-10-15
	2	Global Express	789 Market St, San Francisco	Jane Smith	567 Pine St, Seattle	8.2	Shipped	TRK-23456	2023-10-16
	3	Smart Shipping	210 Park Ave, Chicago	Mike Johnson	321 Cedar St, Boston	15.1	Delivered	TRK-34567	2023-10-17
	4	Swift Transport	456 Elm St, Atlanta	Sarah Davis	567 Peachtree St, Atlanta	9.8	In Progress	TRK-45678	2023-10-18
	5	Fast Forward	789 Market St, Denver	David Wilson	123 14th St, Denver	12.3	Shipped	TRK-56789	2023-10-19
	6	Global Mail	210 Park Ave, Miami	Linda Green	321 Biscayne Blvd, Miami	7.5	In Progress	TRK-67890	2023-10-20
	7	Smart Solutions	456 Elm St, Phoenix	Robert Brown	567 University St, Phoenix	11.0	Delivered	TRK-78901	2023-10-21
	8	Global Connect	789 Market St, Seattle	Emily White	123 Pine St, Seattle	6.4	In Progress	TRK-89012	2023-10-22
	9	Smart Logistic	210 Park Ave, Houston	James Black	321 Congress St, Houston	13.2	Shipped	TRK-90123	2023-10-23

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

```
345      -- Scope: Inner Queries, Non Equi Joins, Equi joins,Exist,Any,All
346
347      -- 1
348 •   select courierID, weight from courier
349     where weight > (select avg(weight)from courier);
```

Result Grid		
	courierID	weight
▶	2	2.00
	4	2.20
	7	2.50
	9	2.30
	10	2.10

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

```
351      -- 2
352 •   select name from employee
353     where salary > (select avg(salary) from employee);
```

Result Grid		
	name	
▶	Rahul Sharma	
	Aryan Sharma	
	Vikram Singh	
	Shanvi Rathore	

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

```
355      -- 3
356 •   select sum(Cost) as totalCost
357     from courierservices
358     where cost< (select max(cost) from courierservices);
```

Result Grid		
	totalCost	
▶	720.00	

52. Find all couriers that have been paid for

```
360 -- 4
361 • select c.*
362   from courier c
363   join payment p on c.courierID=p.courierID;
364
```

Result Grid		Filter Rows:		Export:		Wrap Cell Content:		
CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
1	Aarav Sharma	123, ABC Street, City, State, India	Zara Khan	789, LMN Avenue, City, State, India	1.50	In Transit	TN123456789	2023-12-15
2	Advik Singh	789, LMN Avenue, City, State, India	Vivaan Gupta	1011, PQR Lane, City, State, India	2.00	Pending	TN987654321	2023-12-16
3	Vihaan Reddy	1213, RST Boulevard, City, State, India	Myra Patel	1415, UVW Lane, City, State, India	1.80	Delivered	TN246813579	2023-12-17
4	Aadya Gupta	1617, XYZ Street, City, State, India	Kabir Mishra	1819, MNO Avenue, City, State, India	2.20	In Transit	TN135792468	2023-12-18
5	Arjun Rao	2021, PQR Road, City, State, India	Aanya Singh	2223, ABC Street, City, State, India	1.60	Pending	TN369258147	2023-12-19
6	Riya Verma	1819, MNO Avenue, City, State, India	Advik Singh	789, LMN Avenue, City, State, India	1.90	Delivered	TN579312468	2023-12-20
7	Sara Joshi	2223, ABC Street, City, State, India	Aarav Sharma	123, ABC Street, City, State, India	2.50	In Transit	TN987654322	2023-12-21
8	Anaya Mishra	1011, PQR Lane, City, State, India	Diya Patel	456, XYZ Road, City, State, India	1.70	Pending	TN654321987	2023-12-22
9	Ishaan Kumar	1415, UVW Lane, City, State, India	Vihaan Reddy	1213, RST Boulevard, City, State, India	2.30	In Transit	TN123987456	2023-12-23

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

```
365      -- 5
366 •  select l.*
367   from location l
368   join payment p on p.locationId=l.locationID
369   where p.amount=(select max(amount) from payment);
```

Result Grid			
	LocationID	LocationName	Address
▶	10	Warehouse E	2223, ABC Street, City, State, India

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

```
371 -- 6
372 • select * from courier
373 where weight > (select sum(weight) from courier where senderName='Advik Singh');
374
```

