

ASSIGNMENT:4

Courier Management System

1. Define the Database Schema
2. Create SQL tables for entities such as **User, Courier, Employee, Location, Payment**
3. Define relationships between these tables (**one-to-many, many-to-many, etc.**).

```
1 • CREATE Database if not exists Courier_Management;
2 • use Courier_Management;
3 • CREATE TABLE if not exists User (
4     user_id INT PRIMARY KEY,
5     Name VARCHAR(255),
6     Email VARCHAR(255) UNIQUE,
7     Password VARCHAR(255),
8     Contact_Number VARCHAR(20),
9     Address TEXT
10    );
```

```
12 • CREATE TABLE Courier (
13     CourierID INT PRIMARY KEY,
14     SenderName VARCHAR(255),
15     SenderAddress TEXT,
16     ReceiverName VARCHAR(255),
17     ReceiverAddress TEXT,
18     Weight DECIMAL(5, 2),
19     Status VARCHAR(50),
20     TrackingNumber VARCHAR(20) UNIQUE,
21     DeliveryDate DATE
22    );
23
24 • CREATE TABLE CourierServices (
25     ServiceID INT PRIMARY KEY,
26     ServiceName VARCHAR(100),
27     Cost DECIMAL(8, 2)
28    );
29
30 • CREATE TABLE Employee (
31     EmployeeID INT PRIMARY KEY,
32     Name VARCHAR(255),
33     Email VARCHAR(255) UNIQUE,
34     ContactNumber VARCHAR(20),
35     Role VARCHAR(50),
36     Salary DECIMAL(10, 2)
37    );
```

```
39 • CREATE TABLE Location (
40     LocationID INT PRIMARY KEY,
41     LocationName VARCHAR(100),
42     Address TEXT
43    );
44
45 • CREATE TABLE Payment (
46     PaymentID INT PRIMARY KEY,
47     CourierID INT,
48     LocationID INT,
49     Amount DECIMAL(10, 2),
50     PaymentDate DATE,
51     FOREIGN KEY (CourierID) REFERENCES Courier(CourierID),
52     FOREIGN KEY (LocationID) REFERENCES Location(LocationID)
53    );
```

4.Populate Sample Data

5.Insert sample data into the tables to simulate real-world scenarios.

55 • `INSERT INTO User (user_id, Name, Email, Password, Contact_Number, Address)`

```

56   VALUES
57     (1, 'John Doe', 'john.doe@email.com', 'password123', '1234567890', '123 Main Street, Cityville'),
58     (2, 'Jane Smith', 'jane.smith@email.com', 'pass456', '9876543210', '456 Oak Avenue, Townsville'),
59     (3, 'Bob Johnson', 'bob.johnson@email.com', 'secret789', '5551112233', '789 Pine Lane, Villagetown'),
60     (4, 'Alice Lee', 'alice.lee@email.com', 'securePwd', '7778889999', '987 Maple Drive, Hamletsville'),
61     (5, 'Charlie Brown', 'charlie.brown@email.com', 'brownie456', '1112223333', '654 Birch Street, Riverside'),
62     (6, 'Eva Davis', 'eva.davis@email.com', 'evapass123', '3334445555', '321 Cedar Road, Countryside'),
63     (7, 'Frank Miller', 'frank.miller@email.com', 'frankpass', '8887776666', '555 Elm Avenue, Suburbia'),
64     (8, 'Grace Wilson', 'grace.wilson@email.com', 'grace123', '2223334444', '789 Pine Lane, Uptown'),
65     (9, 'Henry Turner', 'henry.turner@email.com', 'turner456', '9998887777', '456 Oak Avenue, Downtown'),
66     (10, 'Isabel Lopez', 'isabel.lopez@email.com', 'isapwd789', '6665554444', '123 Main Street, Midtown');
67 • select * from User;
68

```

Result Grid Filter Rows: Search Edit: Export/Import:

user_id	Name	Email	Password	Contact_Numb...	Address
1	John Doe	john.doe@email.com	password123	1234567890	123 Main Street, Cityville
2	Jane Smith	jane.smith@email.com	pass456	9876543210	456 Oak Avenue, Townsville
3	Bob Johnson	bob.johnson@email.com	secret789	5551112233	789 Pine Lane, Villagetown
4	Alice Lee	alice.lee@email.com	securePwd	7778889999	987 Maple Drive, Hamletsville
5	Charlie Brown	charlie.brown@email.com	brownie456	1112223333	654 Birch Street, Riverside
6	Eva Davis	eva.davis@email.com	evapass123	3334445555	321 Cedar Road, Countryside
7	Frank Miller	frank.miller@email.com	frankpass	8887776666	555 Elm Avenue, Suburbia
8	Grace Wilson	grace.wilson@email.com	grace123	2223334444	789 Pine Lane, Uptown
9	Henry Turner	henry.turner@email.com	turner456	9998887777	456 Oak Avenue, Downtown
10	Isabel Lopez	isabel.lopez@email.com	isapwd789	6665554444	123 Main Street, Midtown

User 4

Action Output Time Action Response Duration / Fetch Time

462 16:29:16 select * from User LIMIT 0, 1000 10 row(s) returned 0.00057 sec / 0.0000...

Query Completed

68 • `INSERT INTO Courier (CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, DeliveryDate)`

```

69   VALUES
70     (1, 'John Sender', '123 Main Street, Cityville', 'Jane Receiver', '456 Oak Avenue, Townsville', 3.5, 'In Transit', 'TN123456', '2023-01-15'),
71     (2, 'Alice Sender', '987 Maple Drive, Hamletsville', 'Bob Receiver', '789 Pine Lane, Villagetown', 2.2, 'Delivered', 'TN789012', '2023-02-20'),
72     (3, 'Charlie Sender', '654 Birch Street, Riverside', 'Eva Receiver', '321 Cedar Road, Countryside', 1.8, 'Pending', 'TN345678', '2023-03-25'),
73     (4, 'Grace Sender', '789 Pine Lane, Uptown', 'Henry Receiver', '456 Oak Avenue, Downtown', 4.0, 'In Transit', 'TN901234', '2023-04-10'),
74     (5, 'Frank Sender', '555 Elm Avenue, Suburbia', 'Isabel Receiver', '123 Main Street, Midtown', 2.5, 'Delivered', 'TN567890', '2023-05-15'),
75     (6, 'Jane Sender', '456 Oak Avenue, Townsville', 'Bob Receiver', '789 Pine Lane, Villagetown', 3.7, 'Pending', 'TN234567', '2023-06-20'),
76     (7, 'Henry Sender', '999 Elm Road, Downtown', 'Isabel Receiver', '123 Main Street, Midtown', 1.9, 'Delivered', 'TN890123', '2023-07-25'),
77     (8, 'Eva Sender', '321 Cedar Road, Countryside', 'Frank Receiver', '555 Elm Avenue, Suburbia', 2.8, 'In Transit', 'TN456789', '2023-08-10'),
78     (9, 'Bob Sender', '789 Pine Lane, Villagetown', 'Grace Receiver', '456 Oak Avenue, Uptown', 3.3, 'Pending', 'TN012345', '2023-09-15'),
79     (10, 'Isabel Sender', '123 Main Street, Midtown', 'Henry Receiver', '999 Elm Road, Downtown', 2.1, 'Delivered', 'TN678901', '2023-10-20');
80 • select * from Courier;
81

```

Result Grid Filter Rows: Search Edit: Export/Import:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumb...	DeliveryDate
2	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	2.20	Delivered	TN789012	2023-02-20
3	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	1.80	Pending	TN345678	2023-03-25
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10
5	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	2.50	Delivered	TN567890	2023-05-15
6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20
7	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	1.90	Delivered	TN890123	2023-07-25
8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10
9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15
10	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	2.10	Delivered	TN678901	2023-10-20

```

81 • INSERT INTO CourierServices (ServiceID, ServiceName, Cost)
82 VALUES(1, 'Standard Shipping', 10.00),
83 (2, 'Express Shipping', 20.00),
84 (3, 'Same-Day Delivery', 30.00),
85 (4, 'Overnight Shipping', 25.00),
86 (5, 'International Economy', 35.00),
87 (6, 'International Express', 50.00),
88 (7, 'Local Courier', 15.00),
89 (8, '2-Day Shipping', 18.00),
90 (9, 'Priority Shipping', 40.00),
91 (10, 'Economy Shipping', 12.00);
92 • select * from CourierServices;
93

```

100% 3:80

Result Grid Filter Rows: Search Edit: Export/Import: Result Grid Form Editor Field Tools

ServiceID	ServiceName	Cost
1	Standard Shipping	10.00
2	Express Shipping	20.00
3	Same-Day Delivery	30.00
4	Overnight Shipping	25.00
5	International Economy	35.00
6	International Express	50.00
7	Local Courier	15.00
8	2-Day Shipping	18.00
9	Priority Shipping	40.00
10	Economy Shipping	12.00

```

94 • INSERT INTO Employee (EmployeeID, Name, Email, ContactNumber, Role, Salary)
95 VALUES
96 (1, 'Michael Johnson', 'michael.johnson@email.com', '1234567890', 'Manager', 75000.00),
97 (2, 'Emma White', 'emma.white@email.com', '9876543210', 'Software Engineer', 60000.00),
98 (3, 'David Garcia', 'david.garcia@email.com', '5551112233', 'Sales Representative', 50000.00),
99 (4, 'Olivia Robinson', 'olivia.robinson@email.com', '7778889999', 'HR Specialist', 65000.00),
100 (5, 'James Brown', 'james.brown@email.com', '1112223333', 'Data Analyst', 55000.00),
101 (6, 'Sophia Martinez', 'sophia.martinez@email.com', '8887776666', 'Marketing Coordinator', 48000.00),
102 (7, 'Daniel Taylor', 'daniel.taylor@email.com', '2223334444', 'Customer Support', 45000.00),
103 (8, 'Chloe Turner', 'chloe.turner@email.com', '9998887777', 'Product Manager', 80000.00),
104 (9, 'William Lopez', 'william.lopez@email.com', '6665554444', 'Financial Analyst', 70000.00),
105 (10, 'Ava Evans', 'ava.evans@email.com', '3334445555', 'Administrative Assistant', 42000.00);
106 • select * from Employee;
107

```

100% 96:105

Result Grid Filter Rows: Search Edit: Export/Import: Result Grid Form Editor Field Tools

EmployeeID	Name	Email	ContactNum...	Role	Salary
1	Michael Johnson	michael.johnson@email.com	1234567890	Manager	75000.00
2	Emma White	emma.white@email.com	9876543210	Software Engineer	60000.00
3	David Garcia	david.garcia@email.com	5551112233	Sales Representative	50000.00
4	Olivia Robinson	olivia.robinson@email.com	7778889999	HR Specialist	65000.00
5	James Brown	james.brown@email.com	1112223333	Data Analyst	55000.00
6	Sophia Martinez	sophia.martinez@email.com	8887776666	Marketing Coordinator	48000.00
7	Daniel Taylor	daniel.taylor@email.com	2223334444	Customer Support	45000.00
8	Chloe Turner	chloe.turner@email.com	9998887777	Product Manager	80000.00
9	William Lopez	william.lopez@email.com	6665554444	Financial Analyst	70000.00
10	Ava Evans	ava.evans@email.com	3334445555	Administrative Assistant	42000.00

```

109 INSERT INTO Location (LocationID, locationName, Address)
110 VALUES
111 (1, 'Office A', '123 Business Street, Cityville'),
112 (2, 'Warehouse B', '456 Storage Avenue, Townsville'),
113 (3, 'Retail Store C', '789 Market Lane, Villagetown'),
114 (4, 'Tech Park D', '987 Innovation Road, Hamletsville'),
115 (5, 'Mall E', '654 Shopping Street, Riverside'),
116 (6, 'Business Center F', '321 Corporate Drive, Countryside'),
117 (7, 'Downtown G', '555 Main Plaza, Suburbia'),
118 (8, 'Industrial Zone H', '888 Factory Road, Uptown'),
119 (9, 'Residential Area I', '999 Quiet Lane, Downtown'),
120 (10, 'Commercial District J', '222 Busy Avenue, Midtown');
120 • select * from Location;
121

```

100% 1:121

Result Grid Filter Rows: Search Edit: Export/Import: Result Grid Form Editor Field Tools

LocationID	LocationName	Address
1	Office A	123 Business Street, Cityville
2	Warehouse B	456 Storage Avenue, Townsville
3	Retail Store C	789 Market Lane, Villagetown
4	Tech Park D	987 Innovation Road, Hamletsville
5	Mall E	654 Shopping Street, Riverside
6	Business Center F	321 Corporate Drive, Countryside
7	Downtown G	555 Main Plaza, Suburbia
8	Industrial Zone H	888 Factory Road, Uptown
9	Residential Area I	999 Quiet Lane, Downtown
10	Commercial District J	222 Busy Avenue, Midtown

```

121     INSERT INTO Payment (PaymentID, CourierID, LocationID, Amount, PaymentDate)
122     VALUES
123         (1, 1, 3, 25.00, '2023-01-10'),
124         (2, 2, 5, 40.00, '2023-02-15'),
125         (3, 3, 7, 15.00, '2023-03-20'),
126         (4, 4, 2, 30.00, '2023-04-25'),
127         (5, 5, 10, 18.00, '2023-05-30'),
128         (6, 6, 1, 22.50, '2023-06-05'),
129         (7, 7, 8, 12.00, '2023-07-10'),
130         (8, 8, 6, 28.00, '2023-08-15'),
131         (9, 9, 4, 35.50, '2023-09-20'),
132         (10, 10, 9, 19.00, '2023-10-25');
132 •     select * from Payment;
133

```

Result Grid | Filter Rows: Search | Edit: | Export/Import: |

The screenshot shows a database query results grid with the following columns: PaymentID, CourierID, LocationID, Amount, and PaymentDate. The data is as follows:

PaymentID	CourierID	LocationID	Amount	PaymentDate
1	1	3	25.00	2023-01-10
2	2	5	40.00	2023-02-15
3	3	7	15.00	2023-03-20
4	4	2	30.00	2023-04-25
5	5	10	18.00	2023-05-30
6	6	1	22.50	2023-06-05
7	7	8	12.00	2023-07-10
8	8	6	28.00	2023-08-15
9	9	4	35.50	2023-09-20
10	10	9	19.00	2023-10-25

Result Grid | Form Editor | Field Types

Task 2: Select,Where

1. List all customers.

Object Info | Session | Schema: TechShop

134 • select * from User;

100% | 20:134 |

Result Grid | Filter Rows: Search | Edit: | Export/Import: |

The screenshot shows a database query results grid with the following columns: user_id, Name, Email, Password, Contact_Numb..., and Address. The data is as follows:

user_id	Name	Email	Password	Contact_Numb...	Address
1	John Doe	john.doe@email.com	password123	1234567890	123 Main Street, Cityville
2	Jane Smith	jane.smith@email.com	pass456	9876543210	456 Oak Avenue, Townsville
3	Bob Johnson	bob.johnson@email.com	secret789	5551112233	789 Pine Lane, Villagetown
4	Alice Lee	alice.lee@email.com	securePwd	7778889999	987 Maple Drive, Hamletsville
5	Charlie Brown	charlie.brown@email.com	brownie456	1112223333	654 Birch Street, Riverside
6	Eva Davis	eva.davis@email.com	evapass123	3334445555	321 Cedar Road, Countryside
7	Frank Miller	frank.miller@email.com	frankpass	8887776666	555 Elm Avenue, Suburbia
8	Grace Wilson	grace.wilson@email.com	grace123	2223334444	789 Pine Lane, Uptown
9	Henry Turner	henry.turner@email.com	turner456	9998887777	456 Oak Avenue, Downtown
10	Isabel Lopez	isabel.lopez@email.com	isapwd789	6665554444	123 Main Street, Midtown

Result Grid | Form Editor | Field Types

2. List all orders for a specific customer:

```

134 • SELECT *
135   FROM Courier
136   WHERE SenderName = 'John Sender';
137
138

```

100% | 1:137 |

Result Grid | Filter Rows: Search | Edit: | Export/Import: |

The screenshot shows a database query results grid with the following columns: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumb..., and DeliveryDate. The data is as follows:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumb...	DeliveryDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15

Result Grid | Form Editor | Field Types

3. List all couriers:

```

138 • SELECT *
139   FROM Courier;
140

```

100% | 14:139 |

Result Grid | Filter Rows: Search | Edit: | Export/Import: |

The screenshot shows a database query results grid with the following columns: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumb..., and DeliveryDate. The data is as follows:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumb...	DeliveryDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15
2	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	2.20	Delivered	TN789012	2023-02-20
3	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	1.80	Pending	TN345678	2023-03-25
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10
5	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	2.50	Delivered	TN567890	2023-05-15
6	Jane Sender	456 Oak Avenue, Downtown	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20
7	Henry Sender	999 Elm Road, Uptown	Isabel Receiver	123 Main Street, Midtown	1.90	Delivered	TN890123	2023-07-25
8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10
9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15
10	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	2.10	Delivered	TN678901	2023-10-20

Result Grid | Form Editor | Field Types

4. List all packages for a specific order:

```
141 • SELECT *
142 FROM Courier
143 WHERE CourierID = 4;
144
```

Result Grid Filter Rows: Search Edit: Export/Import: Result Grid

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNum...	DeliveryDate
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10

5. List all deliveries for a specific courier:

```
146 • SELECT *
147 FROM Courier
148 WHERE CourierID = 1;
149
```

Result Grid Filter Rows: Search Edit: Export/Import: Result Grid

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNum...	DeliveryDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15

6. List all undelivered packages:

```
151 • SELECT *
152 FROM Courier
153 WHERE Status = 'Pending';
154
```

155 100% 1:154 Result Grid Filter Rows: Search Edit: Export/Import: Result Grid

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNum...	DeliveryDate
3	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	1.80	Pending	TN345678	2023-03-25
6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20
9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15

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

```
155 • SELECT *
156 FROM Courier
157 WHERE DATE(DeliveryDate) = CURRENT_DATE;
158
```

159 100% 1:158 Result Grid Filter Rows: Search Edit: Export/Import: Result Grid

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNum...	DeliveryDate
HULL	HULL	HULL	HULL	HULL	HULL	HULL	HULL	HULL

8. List all packages with a specific status:

```
159 • SELECT *
160 FROM Courier
161 WHERE Status = 'In Transit';
162
```

163 100% 29:161 Result Grid Filter Rows: Search Edit: Export/Import: Result Grid

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNum...	DeliveryDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10
8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10

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

```

163 • SELECT CourierID, COUNT(*) AS TotalPackages
164   FROM Courier
165   GROUP BY CourierID;
166
167

```

100% ◇ | 1:166

Result Grid Filter Rows: Search Export:

The screenshot shows a table titled "Result Grid" with two columns: "CourierID" and "TotalPackages". The data consists of 10 rows, each with a CourierID from 1 to 10 and a TotalPackages value of 1.

CourierID	TotalPackages
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1

Result Grid Form Editor Field Types

10. Find the average delivery time for each courier

```

171 • SELECT c.CourierID, AVG( c.DeliveryDate - p.PaymentDate ) AS AverageDeliveryTime
172   FROM Courier c
173   JOIN Payment p ON c.CourierID = p.CourierID
174   GROUP BY c.CourierID;
175

```

100% ◇ | 22:174

Result Grid Filter Rows: Search Export:

The screenshot shows a table titled "Result Grid" with two columns: "CourierID" and "AverageDeliveryTime". The data consists of 3 rows, each with a CourierID from 1 to 3 and an AverageDeliveryTime of 5.0000.

CourierID	AverageDeliveryTime
1	5.0000
2	5.0000
3	5.0000

Result Grid Form Editor Field Types

11. List all packages with a specific weight range:

```

174 • SELECT *
175   FROM Courier
176   WHERE Weight BETWEEN 2.5 AND 5.0;
177

```

100% ◇ | 34:176

Result Grid Filter Rows: Search Edit: Export/Import:

The screenshot shows a table titled "Result Grid" with nine rows of package data. The columns include CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, and DeliveryDate. The "Weight" column values range from 2.50 to 5.30.

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10
5	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	2.50	Delivered	TN567890	2023-05-15
6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20
8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10
9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15

Result Grid Form Editor Field Types

12. Retrieve employees whose names contain 'John'.

```

178 • SELECT *
179   FROM Employee
180   WHERE Name LIKE '%Johnson%';
181

```

100% ◇ | 29:180

Result Grid Filter Rows: Search Edit: Export/Import:

The screenshot shows a table titled "Result Grid" with one row of employee data. The columns include EmployeeID, Name, Email, ContactNumber, Role, and Salary. The "Name" column value is Michael Johnson.

EmployeeID	Name	Email	ContactNumber	Role	Salary
1	Michael Johnson	michael.johnson@email.com	1234567890	Manager	75000.00

Result Grid Form Editor Field Types

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

```

182 • SELECT c.*
183   FROM Courier c
184   JOIN Payment p ON c.CourierID = p.CourierID
185   WHERE p.Amount > 50.00;
186

```

100% ◇ | 1:181

Result Grid Filter Rows: Search Export:

The screenshot shows a table titled "Result Grid" with one row of courier record data. The columns include CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, and DeliveryDate. The "Amount" column value is 75000.00.

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
1	Michael Johnson	michael.johnson@email.com	1234567890	Manager	75000.00			

Result Grid Form Editor Field Types

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

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

```

187 • SELECT
188     e.EmployeeID,
189     e.Name AS EmployeeName,
190     e.Role,
191     COUNT(c.CourierID) AS TotalCouriersHandled
192 FROM
193     Employee e
194 LEFT JOIN
195     Courier c ON e.EmployeeID = c.CourierID
196 GROUP BY
197     e.EmployeeID, e.Name, e.Role;
198

```

100% 1:198

Result Grid Filter Rows: Search Export:

The screenshot shows a database query results grid. The columns are EmployeeID, EmployeeName, Role, and TotalCouriersHandled. The data consists of 10 rows, each representing an employee with their ID, name, role, and the count of couriers handled. The roles listed are Manager, Software Engineer, Sales Representative, HR Specialist, Data Analyst, Marketing Coordinator, Customer Support, Product Manager, Financial Analyst, and Administrative Assistant.

EmployeeID	EmployeeName	Role	TotalCouriersHandled
1	Michael Johnson	Manager	1
2	Emma White	Software Engineer	1
3	David Garcia	Sales Representative	1
4	Olivia Robinson	HR Specialist	1
5	James Brown	Data Analyst	1
6	Sophia Martinez	Marketing Coordinator	1
7	Daniel Taylor	Customer Support	1
8	Chloe Turner	Product Manager	1
9	William Lopez	Financial Analyst	1
10	Ava Evans	Administrative Assistant	1

Result Grid Form Editor Field Types

15. Calculate the total revenue generated by each location

```

200 • SELECT l.LocationID, l.LocationName, l.Address, SUM(p.Amount) AS TotalRevenue
201 FROM Location l
202 LEFT JOIN Payment p ON l.LocationID = p.LocationID
203 GROUP BY l.LocationID, l.LocationName, l.Address;
204

```

100% 1:205

Result Grid Filter Rows: Search Export:

The screenshot shows a database query results grid. The columns are LocationID, LocationName, Address, and TotalRevenue. The data consists of 10 rows, each representing a location with its ID, name, address, and total revenue. The locations listed are Office A, Warehouse B, Retail Store C, Tech Park D, Mall E, Business Center F, Downtown G, Industrial Zone H, Residential Area I, and Commercial District J.

LocationID	LocationName	Address	TotalRevenue
1	Office A	123 Business Street, Cityville	22.50
2	Warehouse B	456 Storage Avenue, Townsville	30.00
3	Retail Store C	789 Market Lane, Villagetown	25.00
4	Tech Park D	987 Innovation Road, Hamletsburg	35.50
5	Mall E	654 Shopping Street, Riverside	40.00
6	Business Center F	321 Corporate Drive, Countryside	28.00
7	Downtown G	555 Main Plaza, Suburbia	15.00
8	Industrial Zone H	888 Factory Road, Uptown	12.00
9	Residential Area I	999 Quiet Lane, Downtown	19.00
10	Commercial District J	222 Busy Avenue, Midtown	18.00

Result Grid Form Editor Field Types

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

```

206 • SELECT
207     l.LocationID,
208     l.LocationName,
209     l.Address,
210     COUNT(c.CourierID) AS TotalCouriersDelivered
211 FROM
212     Location l
213 LEFT JOIN
214     Payment p ON l.LocationID = p.LocationID
215 LEFT JOIN
216     Courier c ON p.CourierID = c.CourierID
217 WHERE
218     c.Status = 'Delivered'
219 GROUP BY
220     l.LocationID, l.LocationName, l.Address;
221

```

100% 1:221

Result Grid Filter Rows: Search Export:

The screenshot shows a database query results grid. The columns are LocationID, LocationName, Address, and TotalCouriersDelivered. The data consists of 4 rows, each representing a location with its ID, name, address, and the total number of couriers delivered. The locations listed are Mall E, Commercial District J, Industrial Zone H, and Residential Area I, all with a value of 1 for TotalCouriersDelivered.

LocationID	LocationName	Address	TotalCouriersDelivered
5	Mall E	654 Shopping Street, Riverside	1
10	Commercial District J	222 Busy Avenue, Midtown	1
8	Industrial Zone H	888 Factory Road, Uptown	1
9	Residential Area I	999 Quiet Lane, Downtown	1

Result Grid Form Editor Field Types

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

```
224 •   SELECT l.LocationID, l.LocationName, l.Address, SUM(p.Amount) AS TotalPayments
225     FROM Location l
226     LEFT JOIN Payment p ON l.LocationID = p.LocationID
227     GROUP BY l.LocationID, l.LocationName, l.Address
228     HAVING TotalPayments < 30;
229
```

100% 27:228

Result Grid Filter Rows: Search Export:

Result Grid Form Editor Field Types

LocationID	LocationName	Address	TotalPayments
1	Office A	123 Business Street, Cityville	22.50
3	Retail Store C	789 Market Lane, Villagetown	25.00
6	Business Center F	321 Corporate Drive, Countryside	28.00
7	Downtown G	555 Main Plaza, Suburbia	15.00
8	Industrial Zone H	888 Factory Road, Uptown	12.00
9	Residential Area I	999 Quiet Lane, Downtown	19.00
10	Commercial District J	222 Busy Avenue, Midtown	18.00

18. Calculate Total Payments per Location

```
231 •   SELECT l.LocationID, l.LocationName, l.Address, SUM(p.Amount) AS TotalPayments
232     FROM Location l
233     LEFT JOIN Payment p ON l.LocationID = p.LocationID
234     GROUP BY l.LocationID, l.LocationName, l.Address;
235
```

100% 1:235

Result Grid Filter Rows: Search Export:

Result Grid Form Editor Field Types

LocationID	LocationName	Address	TotalPayments
1	Office A	123 Business Street, Cityville	22.50
2	Warehouse B	456 Storage Avenue, Townsville	30.00
3	Retail Store C	789 Market Lane, Villagetown	25.00
4	Tech Park D	987 Innovation Road, Hamletsville	35.50
5	Mall E	654 Shopping Street, Riverside	40.00
6	Business Center F	321 Corporate Drive, Countryside	28.00
7	Downtown G	555 Main Plaza, Suburbia	15.00
8	Industrial Zone H	888 Factory Road, Uptown	12.00
9	Residential Area I	999 Quiet Lane, Downtown	19.00
10	Commercial District J	222 Busy Avenue, Midtown	18.00

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

```
238 •   SELECT c.CourierID, c.TrackingNumber, c.ReceiverName, c.ReceiverAddress, l.LocationName,
239     SUM(p.Amount) AS TotalPayments
240     FROM Courier c
241     JOIN Payment p ON c.CourierID = p.CourierID
242     JOIN Location l ON p.LocationID = l.LocationID
243     WHERE l.LocationID = '456 Storage Avenue, Townsville'
244     GROUP BY c.CourierID, c.TrackingNumber, c.ReceiverName, c.ReceiverAddress, l.LocationName
245     HAVING TotalPayments > 1000;
246
```

100% 29:245

Result Grid Filter Rows: Search Export:

Result Grid

CourierID	TrackingNumber	ReceiverName	ReceiverAddress	LocationName	TotalPayments
-----------	----------------	--------------	-----------------	--------------	---------------

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

```

251 • SELECT c.CourierID, c.TrackingNumber, c.ReceiverName, c.ReceiverAddress,
252     SUM(p.Amount) AS TotalPayments
253 FROM Courier c
254 JOIN Payment p ON c.CourierID = p.CourierID
255 WHERE p.PaymentDate > '2023-01-10'
256 GROUP BY c.CourierID, c.TrackingNumber, c.ReceiverName, c.ReceiverAddress
257 HAVING TotalPayments > 1000;
258
259

```

Result Grid Filter Rows: Search Export: Result Grid

CourierID	TrackingNumber	ReceiverName	ReceiverAddress	TotalPayments

21. Retrieve locations where the total amount received is more than \$5000 before a certain date (PaymentDate > 'YYYY-MM-DD')

```

260 • SELECT l.LocationID, l.LocationName, l.Address,
261     SUM(p.Amount) AS TotalAmountReceived
262 FROM Location l
263 JOIN Payment p ON l.LocationID = p.LocationID
264 WHERE p.PaymentDate > '2023-01-10'
265 GROUP BY l.LocationID, l.LocationName, l.Address
266 HAVING TotalAmountReceived > 5000;
267

```

Result Grid Filter Rows: Search Export: Result Grid

LocationID	LocationName	Address	TotalAmountReceived

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

22. Retrieve Payments with Courier Information.

```

270 • SELECT p.PaymentID, p.CourierID, c.TrackingNumber, c.SenderName AS CourierSenderName, c.SenderAddress AS CourierSenderAddress,
271     c.ReceiverName AS CourierReceiverName, c.ReceiverAddress AS CourierReceiverAddress, p.LocationID, l.LocationName,
272     l.Address AS LocationAddress, p.Amount, p.PaymentDate
273 FROM Payment p
274 JOIN Courier c ON p.CourierID = c.CourierID
275 JOIN Location l ON p.LocationID = l.LocationID;
276
277

```

Result Grid Filter Rows: Search Export: Result Grid Form Editor Field Types

PaymentID	CourierID	TrackingNumber	CourierSenderName	CourierSenderAddress	CourierReceiverName	CourierReceiverAddress	LocationID	LocationName	LocationAddress	Amount
1	1	TN123456	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3	Retail Store C	789 Market Lane, Villagetown	25.00
2	2	TN789012	Alice Sender	987 Maple Drive, Hamletsburg	Bob Receiver	789 Pine Lane, Villagetown	5	Mall E	654 Shopping Street, Riverside	40.00
3	3	TN345678	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	7	Downtown G	555 Main Plaza, Suburbia	15.00
4	4	TN901234	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	2	Warehouse B	456 Storage Avenue, Townsville	30.00
5	5	TN567890	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	10	Commercial District J	222 Busy Avenue, Midtown	18.00
5	6	TN234567	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	1	Office A	123 Business Street, Cityville	22.50
7	7	TN890123	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	8	Industrial Zone H	888 Factory Road, Uptown	12.00
3	8	TN456789	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	6	Business Center F	321 Corporate Drive, Countryside	28.00
9	9	TN012345	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	4	Tech Park D	987 Innovation Road, Hamletsburg	35.50
10	10	TN678901	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	9	Residential Area I	999 Quiet Lane, Downtown	19.00

23. Retrieve Payments with Location Information

```

278 • SELECT p.PaymentID, p.CourierID, p.LocationID, l.LocationName, l.Address AS LocationAddress,
279     p.Amount, p.PaymentDate
280   FROM Payment p
281 JOIN Location l ON p.LocationID = l.LocationID;
282

```

100% 48:281

Result Grid Filter Rows: Search Export:

Form Editor

Field Types

PaymentID	CourierID	LocationID	LocationName	LocationAddress	Amount	PaymentDate
1	1	3	Retail Store C	789 Market Lane, Villagetown	25.00	2023-01-10
2	2	5	Mall E	654 Shopping Street, Riverside	40.00	2023-02-15
3	3	7	Downtown G	555 Main Plaza, Suburbia	15.00	2023-03-20
4	4	2	Warehouse B	456 Storage Avenue, Townsville	30.00	2023-04-25
5	5	10	Commercial District J	222 Busy Avenue, Midtown	18.00	2023-05-30
6	6	1	Office A	123 Business Street, Cityville	22.50	2023-06-05
7	7	8	Industrial Zone H	888 Factory Road, Uptown	12.00	2023-07-10
8	8	6	Business Center F	321 Corporate Drive, Countryside	28.00	2023-08-15
9	9	4	Tech Park D	987 Innovation Road, Hamletsville	35.50	2023-09-20
10	10	9	Residential Area I	999 Quiet Lane, Downtown	19.00	2023-10-25

24. Retrieve Payments with Courier and Location Information

```

283 • SELECT p.PaymentID, p.CourierID, c.TrackingNumber, c.SenderName AS CourierSenderName, c.SenderAddress AS CourierSenderAddress,
284     c.ReceiverName AS CourierReceiverName, c.ReceiverAddress AS CourierReceiverAddress, p.LocationID, l.LocationName,
285     l.Address AS LocationAddress, p.Amount, p.PaymentDate
286   FROM Payment p
287 JOIN Courier c ON p.CourierID = c.CourierID
288 JOIN Location l ON p.LocationID = l.LocationID;
289
290

```

100% 1:290

Result Grid Filter Rows: Search Export:

Form Editor

Field Types

PaymentID	CourierID	TrackingNumber	CourierSenderName	CourierSenderAddress	CourierReceiverName	CourierReceiverAddress	LocationID	LocationName	LocationAddress	Amount
1	1	TN123456	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3	Retail Store C	789 Market Lane, Villagetown	25.00
2	2	TN789012	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	5	Mall E	654 Shopping Street, Riverside	40.00
3	3	TN345678	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	7	Downtown G	555 Main Plaza, Suburbia	15.00
4	4	TN901234	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	2	Warehouse B	456 Storage Avenue, Townsville	30.00
5	5	TN567890	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	10	Commercial District J	222 Busy Avenue, Midtown	18.00
6	6	TN234567	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	1	Office A	123 Business Street, Cityville	22.50
7	7	TN890123	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	8	Industrial Zone H	888 Factory Road, Uptown	12.00
8	8	TN456789	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	6	Business Center F	321 Corporate Drive, Countryside	28.00
9	9	TN012345	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	4	Tech Park D	987 Innovation Road, Hamletsville	35.50
10	10	TN678901	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	9	Residential Area I	999 Quiet Lane, Downtown	19.00

25. List all payments with courier details

```

290 • SELECT p.PaymentID, p.CourierID, c.TrackingNumber, c.SenderName,
291     c.SenderAddress, c.ReceiverName, c.ReceiverAddress, p.LocationID, p.Amount, p.PaymentDate
292   FROM Payment p
293 JOIN Courier c ON p.CourierID = c.CourierID;
294

```

100% 45:293 | 1 error found

Result Grid Filter Rows: Search Export:

Form Editor

Field Types

PaymentID	CourierID	TrackingNumber	SenderId	SenderAddress	ReceiverName	ReceiverAddress	LocationID	Amount	PaymentDate
1	1	TN123456	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3	25.00	2023-01-10
2	2	TN789012	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	5	40.00	2023-02-15
3	3	TN345678	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	7	15.00	2023-03-20
4	4	TN901234	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	2	30.00	2023-04-25
5	5	TN567890	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	10	18.00	2023-05-30
6	6	TN234567	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	1	22.50	2023-06-05
7	7	TN890123	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	8	12.00	2023-07-10
8	8	TN456789	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	6	28.00	2023-08-15
9	9	TN012345	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	4	35.50	2023-09-20
10	10	TN678901	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	9	19.00	2023-10-25

26. Total payments received for each courier

```

296 • SELECT c.CourierID, c.TrackingNumber, c.SenderName , c.SenderAddress ,
297     c.ReceiverName , c.ReceiverAddress , SUM(p.Amount) AS TotalPaymentsReceived
298
299 FROM Courier c
300 JOIN Payment p ON c.CourierID = p.CourierID
301 GROUP BY c.CourierID, c.TrackingNumber;
302

```

100% 1:302

Result Grid Filter Rows: Search Export:

CourierID	TrackingNumber	SenderName	SenderAddress	ReceiverName	ReceiverAddress	TotalPaymentsReceived
1	TN123456	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	25.00
2	TN789012	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	40.00
3	TN345678	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	15.00
4	TN901234	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	30.00
5	TN567890	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	18.00
6	TN234567	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	22.50
7	TN890123	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	12.00
8	TN456789	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	28.00
9	TN012345	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	35.50
10	TN678901	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	19.00

27.List payments made on a specific date

```

302 • SELECT PaymentID, CourierID, LocationID, Amount, PaymentDate
303   FROM Payment
304 WHERE PaymentDate = '2023-09-20'; |

```

100% 35:304

Result Grid Filter Rows: Search Edit: Export/Import:

PaymentID	CourierID	LocationID	Amount	PaymentDate
9	9	4	35.50	2023-09-20

28.Get Courier Information for Each Payment

```

306 • SELECT
307     p.PaymentID,p.CourierID,c.TrackingNumber,
308     c.SenderName,c.SenderAddress,c.ReceiverName,c.ReceiverAddress, p.LocationID,
309     p.Amount,p.PaymentDate
310   FROM Payment p
311   JOIN Courier c ON p.CourierID = c.CourierID;
312

```

100% 45:311

Result Grid Filter Rows: Search Export:

PaymentID	CourierID	TrackingNumber	SenderName	SenderAddress	ReceiverName	ReceiverAddress	LocationID	Amount	PaymentDate
1	1	TN123456	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3	25.00	2023-01-10
2	2	TN789012	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	5	40.00	2023-02-15
3	3	TN345678	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	7	15.00	2023-03-20
4	4	TN901234	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	2	30.00	2023-04-25
5	5	TN567890	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	10	18.00	2023-05-30
6	6	TN234567	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	1	22.50	2023-06-05
7	7	TN890123	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	8	12.00	2023-07-10
8	8	TN456789	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	6	28.00	2023-08-15
9	9	TN012345	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	4	35.50	2023-09-20
10	10	TN678901	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	9	19.00	2023-10-25

29.Get Payment Details with Location

```

313 •   SELECT p.PaymentID, p.CourierID, p.LocationID,
314     l.LocationName, l.Address, p.Amount, p.PaymentDate
315   FROM Payment p
316   JOIN Location l ON p.LocationID = l.LocationID;
317

```

100% ◁ 1:317

Result Grid Filter Rows: Search Export:

PaymentID	CourierID	LocationID	LocationName	Address	Amount	PaymentDate
1	1	3	Retail Store C	789 Market Lane, Villagetown	25.00	2023-01-10
2	2	5	Mall E	654 Shopping Street, Riverside	40.00	2023-02-15
3	3	7	Downtown G	555 Main Plaza, Suburbia	15.00	2023-03-20
4	4	2	Warehouse B	456 Storage Avenue, Townsville	30.00	2023-04-25
5	5	10	Commercial District J	222 Busy Avenue, Midtown	18.00	2023-05-30
6	6	1	Office A	123 Business Street, Cityville	22.50	2023-06-05
7	7	8	Industrial Zone H	888 Factory Road, Uptown	12.00	2023-07-10
8	8	6	Business Center F	321 Corporate Drive, Countryside	28.00	2023-08-15
9	9	4	Tech Park D	987 Innovation Road, Hamletsville	35.50	2023-09-20
10	10	9	Residential Area I	999 Quiet Lane, Downtown	19.00	2023-10-25

30. Calculating Total Payments for Each Courier

```

319 •   SELECT c.CourierID, c.TrackingNumber,
320   c.SenderName , c.SenderAddress ,
321   c.ReceiverName , c.ReceiverAddress ,
322   SUM(p.Amount) AS TotalPayments
323   FROM Courier c
324   JOIN Payment p ON c.CourierID = p.CourierID|
325   GROUP BY c.CourierID, c.TrackingNumber;

```

100% ◁ 44:324

Result Grid Filter Rows: Search Export:

CourierID	TrackingNumb...	SenderName	SenderAddress	ReceiverName	ReceiverAddress	TotalPayments
1	TN123456	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	25.00
2	TN789012	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	40.00
3	TN345678	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	15.00
4	TN901234	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	30.00
5	TN567890	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	18.00
6	TN234567	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	22.50
7	TN890123	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	12.00
8	TN456789	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	28.00
9	TN012345	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	35.50
10	TN678901	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	19.00

31. List Payments Within a Date Range

```

327 •   SELECT PaymentID, CourierID, LocationID, Amount, PaymentDate
328   FROM Payment
329   WHERE PaymentDate BETWEEN '2023-01-10' AND '2023-04-30';
330

```

100% ◁ 1:330

Result Grid Filter Rows: Search Edit: Export/Import:

PaymentID	CourierID	LocationID	Amount	PaymentDate
1	1	3	25.00	2023-01-10
2	2	5	40.00	2023-02-15
3	3	7	15.00	2023-03-20
4	4	2	30.00	2023-04-25

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

```

332 • SELECT u.user_id, u.Name, u.Email, u.Contact_Number, u.Address,
333     c.CourierID, c.SenderName, c.SenderAddress, c.ReceiverName, c.ReceiverAddress, c.Weight,
334     c.Status, c.TrackingNumber, c.DeliveryDate
335 FROM User u
336 LEFT JOIN Courier c ON u.user_id = c.CourierID;
337

```

100% 1:337

Result Grid Filter Rows: Search Export:

The screenshot shows a database query results grid. The columns are: user_id, Name, Email, Contact_Numb..., Address, CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status. The data consists of 10 rows of user and courier information.

user_id	Name	Email	Contact_Numb...	Address	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status
1	John Doe	john.doe@email.com	1234567890	123 Main Street, Cityville	1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transi...
2	Jane Smith	jane.smith@email.com	9876543210	456 Oak Avenue, Townsville	2	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	2.20	Deliv...
3	Bob Johnson	bob.johnson@email.com	5551112233	789 Pine Lane, Villagetown	3	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	1.80	Pendi...
4	Alice Lee	alice.lee@email.com	7778889999	987 Maple Drive, Hamletsville	4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Tra...
5	Charlie Brown	charlie.brown@email.com	1112223333	654 Birch Street, Riverside	5	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	2.50	Deliv...
6	Eva Davis	eva.davis@email.com	3334445555	321 Cedar Road, Countryside	6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pendi...
7	Frank Miller	frank.miller@email.com	8887776666	555 Elm Avenue, Suburbia	7	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	1.90	Deliv...
8	Grace Wilson	grace.wilson@email.com	2223334444	789 Pine Lane, Uptown	8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Tra...
9	Henry Turner	henry.turner@email.com	9998887777	456 Oak Avenue, Downtown	9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pendi...
10	Isabel Lopez	isabel.lopez@email.com	6665554444	123 Main Street, Midtown	10	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	2.10	Deliv...

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

```

339 • SELECT c.CourierID, c.SenderName, c.SenderAddress, c.ReceiverName, c.ReceiverAddress,
340     c.Weight, c.Status, c.TrackingNumber, c.DeliveryDate,
341     cs.ServiceID, cs.ServiceName, cs.Cost
342 FROM Courier c
343 LEFT JOIN CourierServices cs ON c.CourierID = cs.ServiceID;
344

```

100% 1:344

Result Grid Filter Rows: Search Export:

The screenshot shows a database query results grid. The columns are: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumb..., DeliveryDate, ServiceID, ServiceName, Cost. The data consists of 10 rows of courier and service information.

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumb...	DeliveryDate	ServiceID	ServiceName	Cost
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15	1	Standard Shipping	10.00
2	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	2.20	Delivered	TN789012	2023-02-20	2	Express Shipping	20.00
3	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	1.80	Pending	TN345678	2023-03-25	3	Same-Day Delivery	30.00
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10	4	Overnight Shipping	25.00
5	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	2.50	Delivered	TN67890	2023-05-15	5	International Economy	35.00
6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20	6	International Express	50.00
7	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	1.90	Delivered	TN890123	2023-07-25	7	Local Courier	15.00
8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10	8	2-Day Shipping	18.00
9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15	9	Priority Shipping	40.00
10	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	2.10	Delivered	TN678901	2023-10-20	10	Economy Shipping	12.00

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

```

346 • SELECT e.EmployeeID, e.Name, e.Email, e.ContactNumber,
347     e.Role, e.Salary, p.PaymentID, p.CourierID, p.LocationID,
348     p.Amount, p.PaymentDate
349 FROM Employee e
350 LEFT JOIN Payment p ON e.EmployeeID = p.CourierID;
351

```

100% 51:350

Result Grid Filter Rows: Search Export:

The screenshot shows a database query results grid. The columns are: EmployeeID, Name, Email, ContactNumb..., Role, Salary, PaymentID, CourierID, LocationID, Amount, PaymentDate. The data consists of 10 rows of employee and payment information.

EmployeeID	Name	Email	ContactNumb...	Role	Salary	PaymentID	CourierID	LocationID	Amount	PaymentDate
1	Michael Johnson	michael.johnson@email.com	1234567890	Manager	75000.00	1	1	3	25.00	2023-01-10
2	Emma White	emma.white@email.com	9876543210	Software Engineer	60000.00	2	2	5	40.00	2023-02-15
3	David Garcia	david.garcia@email.com	5551112233	Sales Representative	50000.00	3	3	7	15.00	2023-03-20
4	Olivia Robinson	olivia.robinson@email.com	7778889999	HR Specialist	65000.00	4	4	2	30.00	2023-04-25
5	James Brown	james.brown@email.com	1112223333	Data Analyst	55000.00	5	5	10	18.00	2023-05-30
6	Sophia Martinez	sophia.martinez@email.com	8887776666	Marketing Coordinator	48000.00	6	6	1	22.50	2023-06-05
7	Daniel Taylor	daniel.taylor@email.com	2223334444	Customer Support	45000.00	7	7	8	12.00	2023-07-10
8	Chloe Turner	chloe.turner@email.com	9998887777	Product Manager	80000.00	8	8	6	28.00	2023-08-15
9	William Lopez	william.lopez@email.com	6665554444	Financial Analyst	70000.00	9	9	4	35.50	2023-09-20
10	Ava Evans	ava.evans@email.com	3334445555	Administrative Assistant	42000.00	10	10	9	19.00	2023-10-25

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

```

353 •   SELECT u.user_id,u.Name,u.Email,u.Contact_Number,
354       u.Address,cs.ServiceID,cs.ServiceName,cs.Cost
355   FROM User u
356   CROSS JOIN CourierServices cs;
357

```

100% 31:356

Result Grid Filter Rows: Search Export:

	user_id	Name	Email	Contact_Numb...	Address	ServiceID	ServiceName	Cost
▶	10	Isabel Lopez	isabel.lopez@email.com	6665554444	123 Main Street, Midtown	1	Standard Shipping	10.00
◀	9	Henry Turner	henry.turner@email.com	9998887777	456 Oak Avenue, Downtown	1	Standard Shipping	10.00
◀	8	Grace Wilson	grace.wilson@email.com	2223334444	789 Pine Lane, Uptown	1	Standard Shipping	10.00
◀	7	Frank Miller	frank.miller@email.com	8887776666	555 Elm Avenue, Suburbia	1	Standard Shipping	10.00
◀	6	Eva Davis	eva.davis@email.com	3334445555	321 Cedar Road, Countryside	1	Standard Shipping	10.00
◀	5	Charlie Brown	charlie.brown@email.com	1112223333	654 Birch Street, Riverside	1	Standard Shipping	10.00
◀	4	Alice Lee	alice.lee@email.com	7778889999	987 Maple Drive, Hamletsville	1	Standard Shipping	10.00
◀	3	Bob Johnson	bob.johnson@email.com	5551112233	789 Pine Lane, Villagetown	1	Standard Shipping	10.00
◀	2	Jane Smith	jane.smith@email.com	9876543210	456 Oak Avenue, Townsville	1	Standard Shipping	10.00
◀	1	John Doe	john.doe@email.com	1234567890	123 Main Street, Cityville	1	Standard Shipping	10.00

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

```

353 •   SELECT u.user_id,u.Name,u.Email,u.Contact_Number,
354       u.Address,cs.ServiceID,cs.ServiceName,cs.Cost
355   FROM User u
356   CROSS JOIN CourierServices cs;
357

```

100% 31:356

Result Grid Filter Rows: Search Export:

	user_id	Name	Email	Contact_Numb...	Address	ServiceID	ServiceName	Cost
▶	10	Isabel Lopez	isabel.lopez@email.com	6665554444	123 Main Street, Midtown	1	Standard Shipping	10.00
◀	9	Henry Turner	henry.turner@email.com	9998887777	456 Oak Avenue, Downtown	1	Standard Shipping	10.00
◀	8	Grace Wilson	grace.wilson@email.com	2223334444	789 Pine Lane, Uptown	1	Standard Shipping	10.00
◀	7	Frank Miller	frank.miller@email.com	8887776666	555 Elm Avenue, Suburbia	1	Standard Shipping	10.00
◀	6	Eva Davis	eva.davis@email.com	3334445555	321 Cedar Road, Countryside	1	Standard Shipping	10.00
◀	5	Charlie Brown	charlie.brown@email.com	1112223333	654 Birch Street, Riverside	1	Standard Shipping	10.00
◀	4	Alice Lee	alice.lee@email.com	7778889999	987 Maple Drive, Hamletsville	1	Standard Shipping	10.00
◀	3	Bob Johnson	bob.johnson@email.com	5551112233	789 Pine Lane, Villagetown	1	Standard Shipping	10.00
◀	2	Jane Smith	jane.smith@email.com	9876543210	456 Oak Avenue, Townsville	1	Standard Shipping	10.00
◀	1	John Doe	john.doe@email.com	1234567890	123 Main Street, Cityville	1	Standard Shipping	10.00

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

```

406 •   SELECT c.CourierID, c.SenderName, c.SenderAddress, c.ReceiverName, c.ReceiverAddress, c.ReceiverAddress, c.Weight,
407     c.Status, c.TrackingNumber, c.DeliveryDate, u.user_id, u.Name , u.Email , u.Contact_Number,
408     u.Address AS SenderAddress
409   FROM Courier c
410   LEFT JOIN
411     User u ON c.SenderName = u.Name;
412

```

100% 1:412

Result Grid Filter Rows: Search Export:

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNum...	DeliveryDate	user_id	Name	Email	Contact_Numb...	SenderAddress
▶	1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15	NULL	NULL	NULL	NULL
◀	2	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	2.20	Delivered	TN789012	2023-02-20	NULL	NULL	NULL	NULL
◀	3	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	1.80	Pending	TN345678	2023-03-25	NULL	NULL	NULL	NULL
◀	4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10	NULL	NULL	NULL	NULL
◀	5	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	2.50	Delivered	TN567890	2023-05-15	NULL	NULL	NULL	NULL
◀	6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20	NULL	NULL	NULL	NULL
◀	7	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	1.90	Delivered	TN890123	2023-07-25	NULL	NULL	NULL	NULL
◀	8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10	NULL	NULL	NULL	NULL
◀	9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15	NULL	NULL	NULL	NULL
◀	10	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	2.10	Delivered	TN678901	2023-10-20	NULL	NULL	NULL	NULL

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

```
363 • SELECT e.EmployeeID, e.Name, e.Email,
364     e.ContactNumber, e.Role,
365     e.Salary, COUNT(c.CourierID) AS NumberOfCouriers
366 FROM Employee e
367 LEFT JOIN Courier c ON e.EmployeeID = c.CourierID
368 GROUP BY e.EmployeeID, e.Name, e.Email, e.ContactNumber, e.Role, e.Salary;
```

100% 75:368

Result Grid Filter Rows: Search Export:

EmployeeID	Name	Email	ContactNumber	Role	Salary	NumberOfCouriers
1	Michael Johnson	michael.johnson@email.com	1234567890	Manager	75000.00	1
2	Emma White	emma.white@email.com	9876543210	Software Engineer	60000.00	1
3	David Garcia	david.garcia@email.com	5551112233	Sales Representative	50000.00	1
4	Olivia Robinson	olivia.robinson@email.com	7778889999	HR Specialist	65000.00	1
5	James Brown	james.brown@email.com	1112223333	Data Analyst	55000.00	1
6	Sophia Martinez	sophia.martinez@email.com	8887776666	Marketing Coordinator	48000.00	1
7	Daniel Taylor	daniel.taylor@email.com	2223334444	Customer Support	45000.00	1
8	Chloe Turner	chloe.turner@email.com	9998887777	Product Manager	80000.00	1
9	William Lopez	william.lopez@email.com	6665554444	Financial Analyst	70000.00	1
10	Ava Evans	ava.evans@email.com	3334445555	Administrative Assistant	42000.00	1

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

```
370 • SELECT l.LocationID, l.LocationName, l.Address AS LocationAddress,
371     SUM(p.Amount) AS TotalPaymentAmount
372 FROM Location l
373 LEFT JOIN Payment p ON l.LocationID = p.LocationID
374 GROUP BY l.LocationID, l.LocationName, l.Address;
```

100% 40:371

Result Grid Filter Rows: Search Export:

LocationID	LocationName	LocationAddress	TotalPaymentAmount
1	Office A	123 Business Street, Cityville	22.50
2	Warehouse B	456 Storage Avenue, Townsville	30.00
3	Retail Store C	789 Market Lane, Villagetown	25.00
4	Tech Park D	987 Innovation Road, Hamletsville	35.50
5	Mall E	654 Shopping Street, Riverside	40.00
6	Business Center F	321 Corporate Drive, Countryside	28.00
7	Downtown G	555 Main Plaza, Suburbia	15.00
8	Industrial Zone H	888 Factory Road, Uptown	12.00
9	Residential Area I	999 Quiet Lane, Downtown	19.00
10	Commercial District J	222 Busy Avenue, Midtown	18.00

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

```
376 • SELECT *
377     FROM Courier
378     WHERE SenderName = 'John Sender';
```

100% 34:378

Result Grid Filter Rows: Search Edit: Export/Import:

CourierID	SenderId	SenderIdAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15

42. List all employees who share the same role.

```
380 • SELECT e1.EmployeeID, e1.Name, e1.Role, e2.EmployeeID, e2.Name
381     FROM Employee e1
382     JOIN Employee e2 ON e1.Role = e2.Role AND e1.EmployeeID < e2.EmployeeID;
383
```

29% 1:383

Result Grid Filter Rows: Search Export:

EmployeeID Name Role EmployeeID Name

Result Grid

Form Editor

Field Types

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

```

385 • SELECT p.PaymentID, c.CourierID, c.SenderName, c.SenderAddress, c.ReceiverName, c.ReceiverAddress,
386     c.Status, p.Amount, p.PaymentDate, l.LocationID, l.LocationName, l.Address
387 FROM Payment p
388 JOIN Courier c ON p.CourierID = c.CourierID
389 JOIN Location l ON c.SenderAddress = l.Address;

```

100% 48:389

Result Grid Filter Rows: Search Export:

PaymentID CourierID SenderName SenderAddress ReceiverName ReceiverAddress Status Amount PaymentDate LocationID LocationName Address



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

```

392 • SELECT c1.CourierID, c1.SenderName, c1.SenderAddress, c1.ReceiverName,
393     c1.ReceiverAddress, c1.Weight, c1.Status, c1.TrackingNumber, c1.DeliveryDate,
394     c2.CourierID, c2.SenderName, c2.SenderAddress, c2.ReceiverName,
395     c2.ReceiverAddress, c2.Weight, c2.Status, c2.TrackingNumber, c2.DeliveryDate
396 FROM Courier c1
397 JOIN Courier c2 ON c1.SenderAddress = c2.SenderAddress AND c1.CourierID < c2.CourierID;

```

100% 71:392

Result Grid Filter Rows: Search Export:

CourierID SenderName SenderAddress ReceiverName ReceiverAddress Weight Status TrackingNumber DeliveryDate CourierID SenderName SenderAddress ReceiverName ReceiverAddress Weight Status



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

```

399 • SELECT e.EmployeeID, e.Name, e.Email, e.ContactNumber, e.Role,
400     e.Salary, COUNT(c.CourierID)
401 FROM Employee e
402 LEFT JOIN Courier c ON e.EmployeeID = c.CourierID AND c.Status = 'Delivered'
403 GROUP BY e.EmployeeID, e.Name, e.Email, e.ContactNumber, e.Role, e.Salary;

```

100% 75:403

Result Grid Filter Rows: Search Export:

EmployeeID	EmployeeName	EmployeeEmail	EmployeeContactNum...	EmployeeRole	EmployeeSalary	NumberOfDeliveri...
1	Michael Johnson	michael.johnson@email.com	1234567890	Manager	75000.00	0
2	Emma White	emma.white@email.com	9876543210	Software Engineer	60000.00	1
3	David Garcia	david.garcia@email.com	5551112233	Sales Representative	50000.00	0
4	Olivia Robinson	olivia.robinson@email.com	7778889999	HR Specialist	65000.00	0
5	James Brown	james.brown@email.com	1112223333	Data Analyst	55000.00	1
6	Sophia Martinez	sophia.martinez@email.com	8887776666	Marketing Coordinator	48000.00	0
7	Daniel Taylor	daniel.taylor@email.com	2223334444	Customer Support	45000.00	1
8	Chloe Turner	chloe.turner@email.com	9998887777	Product Manager	80000.00	0
9	William Lopez	william.lopez@mail.com	6665554444	Financial Analyst	70000.00	0
10	Ava Evans	ava.evans@email.com	3334445555	Administrative Assistant	42000.00	1



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

```

414 • SELECT
415     CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress,
416     Weight, Status, TrackingNumber, DeliveryDate
417     FROM Courier
418     WHERE Weight > (SELECT AVG(Weight) FROM Courier);
419
420
100% 1:419

```

The screenshot shows a 'Result Grid' window with the following columns: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, and DeliveryDate. The data consists of 9 rows, each representing a courier entry with their respective details.

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10
6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20
8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10
9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15

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

```

421 • SELECT
422     Name,
423     Salary
424     FROM
425     Employee
426     WHERE
427         Salary > (SELECT AVG(Salary) FROM Employee);
428
429
100% 1:428

```

The screenshot shows a 'Result Grid' window with the columns 'Name' and 'Salary'. The data consists of 5 rows, each representing an employee's name and salary.

Name	Salary
Michael Johnson	75000.00
Emma White	60000.00
Olivia Robinson	65000.00
Chloe Turner	80000.00
William Lopez	70000.00

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

```

431 • SELECT
432     SUM(Cost) AS TotalCost
433     FROM
434     CourierServices
435     WHERE
436         Cost < (SELECT MAX(Cost) FROM CourierServices);
437
438
100% 1:437

```

The screenshot shows a 'Result Grid' window with the column 'TotalCost'. The data consists of 1 row, showing the total cost of all courier services.

TotalCost
205.00

52. Find all couriers that have been paid for

```

439 • SELECT c.CourierID, c.SenderName, c.SenderAddress, c.ReceiverName,
440     c.ReceiverAddress, c.Weight, c.Status, c.TrackingNumber, c.DeliveryDate, p.PaymentID,
441     p.LocationID, p.Amount, p.PaymentDate
442     FROM Courier c
443     INNER JOIN Payment p ON c.CourierID = p.CourierID;
444
445
100% 1:446

```

The screenshot shows a 'Result Grid' window with the following columns: CourierID, SenderName, SenderAddress, ReceiverName, ReceiverAddress, Weight, Status, TrackingNumber, DeliveryDate, PaymentID, LocationID, Amount, and PaymentDate. The data consists of 10 rows, each representing a courier entry with their respective details.

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	PaymentID	LocationID	Amount	PaymentDate
1	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15	1	3	25.00	2023-01-10
2	Alice Sender	987 Maple Drive, Hamletsville	Bob Receiver	789 Pine Lane, Villagetown	2.20	Delivered	TN89012	2023-02-20	2	5	40.00	2023-02-15
3	Charlie Sender	654 Birch Street, Riverside	Eva Receiver	321 Cedar Road, Countryside	1.80	Pending	TN345678	2023-03-25	3	7	15.00	2023-03-20
4	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10	4	2	30.00	2023-04-25
5	Frank Sender	555 Elm Avenue, Suburbia	Isabel Receiver	123 Main Street, Midtown	2.50	Delivered	TN567890	2023-05-15	5	10	18.00	2023-05-30
6	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20	6	1	22.50	2023-06-05
7	Henry Sender	999 Elm Road, Downtown	Isabel Receiver	123 Main Street, Midtown	1.90	Delivered	TN890123	2023-07-25	7	8	12.00	2023-07-10
8	Eva Sender	321 Cedar Road, Countryside	Frank Receiver	555 Elm Avenue, Suburbia	2.80	In Transit	TN456789	2023-08-10	8	6	28.00	2023-08-15
9	Bob Sender	789 Pine Lane, Villagetown	Grace Receiver	456 Oak Avenue, Uptown	3.30	Pending	TN012345	2023-09-15	9	4	35.50	2023-09-20
10	Isabel Sender	123 Main Street, Midtown	Henry Receiver	999 Elm Road, Downtown	2.10	Delivered	TN678901	2023-10-20	10	9	19.00	2023-10-25

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

```
446 •  SELECT
447      l.LocationID,
448      l.LocationName,
449      l.Address,
450      p.PaymentID,
451      p.Amount AS MaximumPaymentAmount,
452      p.PaymentDate
453  FROM Location l
454  JOIN Payment p ON l.LocationID = p.LocationID
455  WHERE p.Amount = (SELECT MAX(Amount) FROM Payment);|
```

100% 52:455

Result Grid Filter Rows: Search Export:

LocationID	LocationName	Address	PaymentID	MaximumPaymentAmo...	PaymentDate
5	Mall E	654 Shopping Street, Riverside	2	40.00	2023-02-15



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

```
458 •  SELECT c.CourierID, c.SenderName, c.SenderAddress, c.ReceiverName,
459      c.ReceiverAddress, c.Weight, c.Status, c.TrackingNumber, c.DeliveryDate
460  FROM Courier c
461  WHERE c.Weight > (
462      SELECT MAX(Weight)
463      FROM Courier
464      WHERE SenderName = 'Bob Sender'
465  );|
```

100% 7:465

Result Grid Filter Rows: Search

Edit: Export/Import:

CourierID	SenderId	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNum...	DeliveryDate
1	John	John Sender	123 Main Street, Cityville	Jane Receiver	456 Oak Avenue, Townsville	3.50	In Transit	TN123456	2023-01-15
4	Grace	Grace Sender	789 Pine Lane, Uptown	Henry Receiver	456 Oak Avenue, Downtown	4.00	In Transit	TN901234	2023-04-10
6	Jane	Jane Sender	456 Oak Avenue, Townsville	Bob Receiver	789 Pine Lane, Villagetown	3.70	Pending	TN234567	2023-06-20
		NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

