ASSIGNMENT 4- COURIER MANAGEMENT SYSTEM
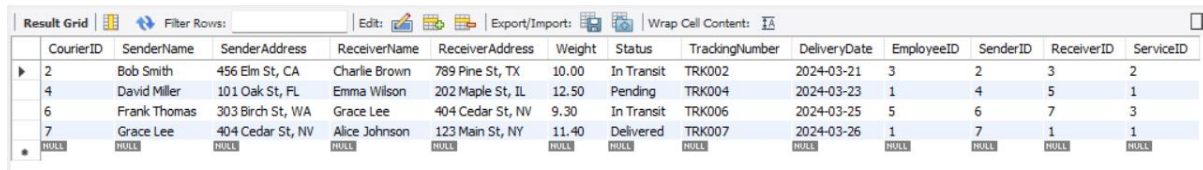
TASK 4(Part two)

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

(Executed on Mysql Workbench)

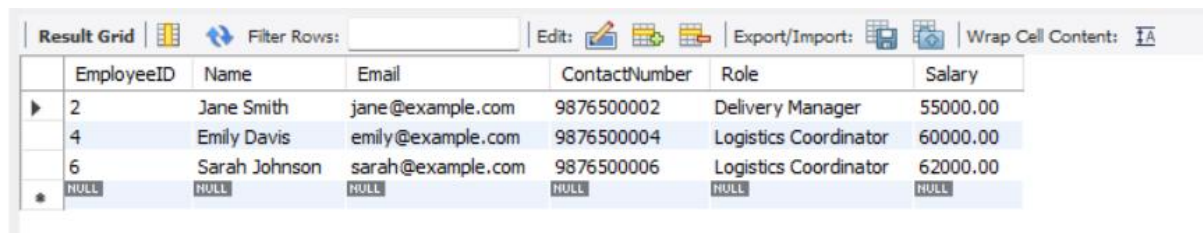### 49. Find couriers that have a weight greater than the average weight of all couriers

Select * from courier where weight>(Select avg(weight) from courier);

	CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	EmployeeID	SenderID	ReceiverID	ServiceID
▶	2	Bob Smith	456 Elm St, CA	Charlie Brown	789 Pine St, TX	10.00	In Transit	TRK002	2024-03-21	3	2	3	2
	4	David Miller	101 Oak St, FL	Emma Wilson	202 Maple St, IL	12.50	Pending	TRK004	2024-03-23	1	4	5	1
	6	Frank Thomas	303 Birch St, WA	Grace Lee	404 Cedar St, NV	9.30	In Transit	TRK006	2024-03-25	5	6	7	3
	7	Grace Lee	404 Cedar St, NV	Alice Johnson	123 Main St, NY	11.40	Delivered	TRK007	2024-03-26	1	7	1	1
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

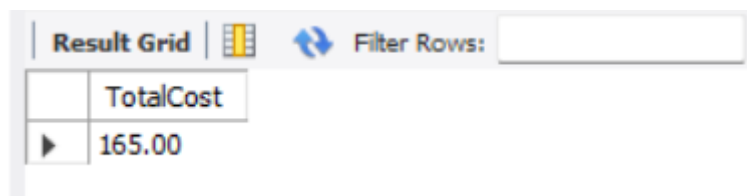### 50. Find the names of all employees who have a salary greater than the average salary

Select * from employee_table where Salary>(Select avg(salary) from employee_table);

	EmployeeID	Name	Email	ContactNumber	Role	Salary
▶	2	Jane Smith	jane@example.com	9876500002	Delivery Manager	55000.00
	4	Emily Davis	emily@example.com	9876500004	Logistics Coordinator	60000.00
	6	Sarah Johnson	sarah@example.com	9876500006	Logistics Coordinator	62000.00
*	NULL	NULL	NULL	NULL	NULL	NULL

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

SELECT SUM(Cost) AS TotalCost FROM courierservices WHERE Cost < (SELECT MAX(Cost) FROM courierservices);

	TotalCost
▶	165.00

52. Find all couriers that have been paid for

SELECT c.* FROM courier c WHERE EXISTS (SELECT * FROM payment_table p WHERE p.CourierId = c.CourierId);

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	EmployeeID	SenderID	ReceiverID	ServiceID
1	Alice Johnson	123 Main St, NY	Bob Smith	456 Elm St, CA	5.50	Delivered	TRK001	2024-03-20	1	1	2	1
2	Bob Smith	456 Elm St, CA	Charlie Brown	789 Pine St, TX	10.00	In Transit	TRK002	2024-03-21	3	2	3	2
3	Charlie Brown	789 Pine St, TX	David Miller	101 Oak St, FL	7.20	Delivered	TRK003	2024-03-22	5	3	4	3
4	David Miller	101 Oak St, FL	Emma Wilson	202 Maple St, IL	12.50	Pending	TRK004	2024-03-23	1	4	5	1
5	Emma Wilson	202 Maple St, IL	Frank Thomas	303 Birch St, WA	6.80	Delivered	TRK005	2024-03-24	3	5	6	2
6	Frank Thomas	303 Birch St, WA	Grace Lee	404 Cedar St, NV	9.30	In Transit	TRK006	2024-03-25	5	6	7	3
7	Grace Lee	404 Cedar St, NV	Alice Johnson	123 Main St, NY	11.40	Delivered	TRK007	2024-03-26	1	7	1	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

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

SELECT l.LocationId, l.LocationName, l.Address,p.Amount FROM location_table l JOIN payment_table p ON l.LocationId = p.LocationId WHERE p.Amount = (SELECT MAX(Amount) FROM payment_table);

LocationId	LocationName	Address	Amount
1	New York Hub	500 Madison Ave, NY	200.00

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

SELECT weight FROM courier WHERE SenderName='Bob Smith';

weight
10.00

SELECT * FROM courier WHERE weight > ALL (SELECT weight FROM courier WHERE SenderName='Bob Smith');

CourierID	SenderName	SenderAddress	ReceiverName	ReceiverAddress	Weight	Status	TrackingNumber	DeliveryDate	EmployeeID	SenderID	ReceiverID	ServiceID
4	David Miller	101 Oak St, FL	Emma Wilson	202 Maple St, IL	12.50	Pending	TRK004	2024-03-23	1	4	5	1
7	Grace Lee	404 Cedar St, NV	Alice Johnson	123 Main St, NY	11.40	Delivered	TRK007	2024-03-26	1	7	1	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

(This query returns all couriers weighing more than every courier sent by 'Bob Smith' (10.00 kg), correctly showing only David Miller's (12.50 kg) and Grace Lee's (11.40 kg))