



```

1  /*
2  CREATED BY: Jonathan Sebastiani
3  CREATED DATE: 10/17/2025
4  DESCRIPTION: Define the top employees with the highest total amout of sales
5  NOTES: Combine 3 different databases to form a relational evaluation of individual sales involving invoice, customer, and employee.
6  Group by employee
7  */
8
9  SELECT
10     e.EmployeeId AS 'Employee ID',
11     e.FirstName || ' ' || e.LastName AS 'Sales Rep / Employee Full Name',
12     SUM(i.total) AS 'Total Sales Amount'
13 FROM
14     Invoice AS i
15 LEFT OUTER JOIN
16     Customer AS c
17 ON
18     i.CustomerId = c.CustomerId
19 LEFT OUTER JOIN
20     Employee AS e
21 ON
22     c.SupportRepId = e.EmployeeId
23 GROUP BY
24     e.EmployeeId
25
26 /*
27 RESULTS:
28 We find that there are only 3 employees who have actually been making any sales at all.
29 Of which, Jane Peacock has the most sales with a total amount of $1,833.90
30 */
31
    
```

	Employee ID	Sales Rep / Employee Full Name	Total Sales Amount
1	3	Jane Peacock	1833.9
2	4	Margaret Park	775.4
3	5	Steve Johnson	720.16

```
1  /*
2  CREATED BY: Jonathan Sebastiani
3  CREATED DATE: 10/17/2025
4  DESCRIPTION: Define the top 10 individual sales made by an employee
5  NOTES: Combine 3 different databases to form a relational evaluation of individual sales involving invoice, customer, and employee.
6  */
7
8  SELECT
9      i.CustomerId AS 'Customer ID',
10     c.FirstName || ' ' || c.LastName AS 'Customer Full Name',
11     e.EmployeeId AS 'Employee ID',
12     e.FirstName || ' ' || e.LastName AS 'Sales Rep / Employee Full Name',
13     i.InvoiceId AS 'Invoice ID',
14     strftime("%Y-%m-%d", i.InvoiceDate) AS 'Date; no time',
15     i.total AS 'Individual Sale Amount'
16 FROM
17     Invoice AS i
18 LEFT OUTER JOIN
19     Customer AS c
20 ON
21     i.CustomerId = c.CustomerId
22 LEFT OUTER JOIN
23     Employee AS e
24 ON
25     c.SupportRepId = e.EmployeeId
26 ORDER BY
27     total DESC
28 LIMIT 10
```

	Customer ID	Customer Full Name	Employee ID	Sales Rep / Employee Full Name	Invoice ID	Date; no time	Individual Sale Amount	
1	60	John Doein	3	Jane Peacock	413	2011-11-01	1000.86	
2	6	Helena Holý	5	Steve Johnson	404	2013-11-13	25.86	
3	26	Richard Cunningham	4	Margaret Park	299	2012-08-05	23.86	
4	45	Ladislav Kovács	3	Jane Peacock	96	2010-02-18	21.86	
5	46	Hugh O'Reilly	3	Jane Peacock	194	2011-04-28	21.86	
6	7	Astrid Gruber	5	Steve Johnson	89	2010-01-18	18.86	
7	25	Victor Stevens	5	Steve Johnson	201	2011-05-29	18.86	
8	57	Luis Rojas	5	Steve Johnson	88	2010-01-13	17.91	
9	5	František Wichterlová	4	Margaret Park	306	2012-09-05	16.86	
10	43	Isabelle Mercier	3	Jane Peacock	313	2012-10-06	16.86	



```
1  /*
2  CREATED BY: Jonathan Sebastiani
3  CREATED DATE: 10/14/2025
4  DESCRIPTION: Adding, changing, or deleting data from a database
5      DML (Data Manipulation Language)
6      - INSERT
7      - UPDATE
8      - DELETE
9
10 Notes:
11     Be careful not to accidentally update or delete everything and lose data
12 */
13
14 -- Add an additional artist into the database
15 INSERT INTO
16     Artist(name) -- The table and field that you want to insert into
17 VALUES('Bob Marley')
18
19 -- Update data
20 UPDATE
21     Artist
22 Name = 'Damion Marley'
23 WHERE
24     ArtistId = 276
25
26 -- Delete data
27 DELETE FROM
28     Artist
29 WHERE
30     ArtistId = 276
31
```


New Database

Open Database

Write Changes

Revert Changes

Undo

Open Project

Save Project

Attach Database

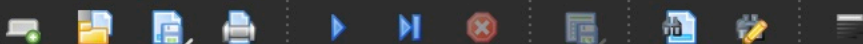
Close Database

Database Structure

Browse Data

Edit Pragmas

Execute SQL



... ... Nesting_Queries_and_... Relational_Datab... To...

```
1  /*
2  CREATED BY: Jonathan Sebastiani
3  CREATED DATE: 10/14/2025
4  DESCRIPTION: Creat a view with the running global average for sales
5
6  Notes:
7  The DISTINCT clause returns only unique values for that field
8  */
9
10 CREATE VIEW V_GlobalAverage AS
11     SELECT
12         AVG(total) as 'Global Average'
13     FROM
14         Invoice
15
```



```
1  /*
2  CREATED BY: Jonathan Sebastiani
3  CREATED DATE: 10/14/2025
4  DESCRIPTION: Nesting Queries with multiple results
5      Find the city, address, and date for the invoices with id 251, 252, and 254
6  */
7
8  SELECT
9      BillingCity,
10     BillingAddress,
11     InvoiceId,
12     InvoiceDate
13 FROM
14     Invoice
15 WHERE
16     InvoiceDate IN
17     (Select InvoiceDate from Invoice where InvoiceId IN (251, 252, 254))
```

	BillingCity	BillingAddress	InvoiceId	InvoiceDate
1	São Paulo	Rua Dr. Falcão Filho, 155	251	2012-01-09 00:00:00
2	São Paulo	Av. Paulista, 2022	252	2012-01-22 00:00:00
3	Brasília	Qe 7 Bloco G	253	2012-01-22 00:00:00
4	Vancouver	700 W Pender Street	254	2012-01-23 00:00:00

Execution finished without errors.

Result: 4 rows returned in 19ms



```
1  /*
2  CREATED BY: Jonathan Sebastiani
3  CREATED DATE: 10/14/2025
4  DESCRIPTION: Define the music tracks that have not have any sales.
5
6  Notes:
7  The DISTINCT clause returns only unique values for that field
8  */
9
10 SELECT
11     TrackId,
12     Name,
13     Composer
14 FROM
15     Track
16 WHERE
17     TrackId NOT IN
18     (SELECT
19         DISTINCT TrackId
20     FROM
21         InvoiceLine)
22
```

	TrackId	Name	Composer	
1	7	BitChill	Kobus leche robertsi	
2	11	Emulation Rock	Abshire Inc	
3	17	Grassbrassroots	Adams McKenzie and Auer	
4	18	ljh	Anderson Group	
5	22	Inverse	AndersonMurazik	
6	23	freshthinking	Ankunding-Jones	
7	27	Fine Fran	Aufderhar-Raynor	
8	29	Selfenabling	Bahringer Group	