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/* Query 1 - Top 5: Faturamento total anual por gênero musical */
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```
WITH sub09
AS (SELECT
    g.GenreId,
    STRFTIME('%Y', i.InvoiceDate) Year,
    SUM(i.Total) Total
FROM Invoice i
JOIN InvoiceLine il
    ON i.InvoiceId = il.InvoiceId
JOIN Track t
    ON t.TrackId = il.TrackId
JOIN Genre g
    ON g.GenreId = t.GenreId
GROUP BY 1,
        2
HAVING STRFTIME('%Y', i.InvoiceDate) = '2009'),
```

```
sub10
AS (SELECT
    g.GenreId,
    STRFTIME('%Y', i.InvoiceDate) Year,
    SUM(i.Total) Total
FROM Invoice i
JOIN InvoiceLine il
    ON i.InvoiceId = il.InvoiceId
JOIN Track t
    ON t.TrackId = il.TrackId
JOIN Genre g
    ON g.GenreId = t.GenreId
GROUP BY 1,
        2
HAVING STRFTIME('%Y', i.InvoiceDate) = '2010'),
```

```
sub11
AS (SELECT
    g.GenreId,
    STRFTIME('%Y', i.InvoiceDate) Year,
    SUM(i.Total) Total
FROM Invoice i
JOIN InvoiceLine il
    ON i.InvoiceId = il.InvoiceId
JOIN Track t
    ON t.TrackId = il.TrackId
JOIN Genre g
    ON g.GenreId = t.GenreId
GROUP BY 1,
        2
HAVING STRFTIME('%Y', i.InvoiceDate) = '2011'),
```

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sub12
AS (SELECT
    g.GenreId,
    STRFTIME('%Y', i.InvoiceDate) Year,
    SUM(i.Total) Total
FROM Invoice i
```

```
JOIN InvoiceLine il
  ON i.InvoiceId = il.InvoiceId
JOIN Track t
  ON t.TrackId = il.TrackId
JOIN Genre g
  ON g.GenreId = t.GenreId
GROUP BY 1,
        2
HAVING STRFTIME('%Y', i.InvoiceDate) = '2012'),

sub13
AS (SELECT
  g.GenreId,
  STRFTIME('%Y', i.InvoiceDate) Year,
  SUM(i.Total) Total
FROM Invoice i
JOIN InvoiceLine il
  ON i.InvoiceId = il.InvoiceId
JOIN Track t
  ON t.TrackId = il.TrackId
JOIN Genre g
  ON g.GenreId = t.GenreId
GROUP BY 1,
        2
HAVING STRFTIME('%Y', i.InvoiceDate) = '2013')

SELECT
  g.name MusicalGenre,
  COALESCE(sub09.Total, 0) Total_2009,
  COALESCE(sub10.Total, 0) Total_2010,
  COALESCE(sub11.Total, 0) Total_2011,
  COALESCE(sub12.Total, 0) Total_2012,
  COALESCE(sub13.Total, 0) Total_2013,
  (COALESCE(sub09.Total, 0) + COALESCE(sub10.Total, 0) + COALESCE(sub11.Total, 0) +
   COALESCE(sub12.Total, 0) + COALESCE(sub13.Total, 0)) TotalGenre
FROM Genre g
LEFT JOIN sub13
  ON g.GenreId = sub13.GenreId
LEFT JOIN sub12
  ON g.GenreId = sub12.GenreId
LEFT JOIN sub11
  ON g.GenreId = sub11.GenreId
LEFT JOIN sub10
  ON g.GenreId = sub10.GenreId
LEFT JOIN sub09
  ON g.GenreId = sub09.GenreId
ORDER BY 7 DESC
LIMIT 5;
```

```
/* Query 2 - Quantidade de vendas de músicas de Rock em 2013, por país */
WITH t1
AS (SELECT
    i.BillingCountry Country,
    il.TrackId,
    t.GenreId,
    SUM(il.Quantity) Purchases
FROM Invoice i
JOIN InvoiceLine il
    ON i.InvoiceId = il.InvoiceId
JOIN Track t
    ON t.TrackId = il.TrackId
GROUP BY 1,
         2,
         3
HAVING STRFTIME('%Y', i.InvoiceDate) = '2013')

SELECT
    t1.Country,
    SUM(t1.Purchases) Purchases
FROM t1
JOIN Genre g
    ON g.GenreId = t1.GenreId
WHERE t1.GenreId = 1
GROUP BY 1
ORDER BY 2 DESC;
```

```
/* Query 3 - Artistas com músicas mais populares na Europa em 2013, com compras acima
da média */
WITH t1
AS (SELECT
    i.BillingCountry Country,
    il.TrackId,
    t.AlbumId,
    SUM(il.Quantity) Purchases
FROM Invoice i
JOIN Invoiceline il
    ON i.InvoiceId = il.InvoiceId
JOIN Track t
    ON t.TrackId = il.TrackId
WHERE Country IN ('Austria', 'Belgium', 'Czech Republic', 'Denmark', 'Finland',
'France', 'Germany', 'Hungary', 'Ireland', 'Italy', 'Netherlands', 'Norway',
'Poland', 'Portugal', 'Spain', 'Sweden', 'United Kingdom')
GROUP BY 1,
        2,
        3
HAVING STRFTIME('%Y', i.InvoiceDate) = '2013'),

t2
AS (SELECT
    ar.Name Artist,
    SUM(t1.Purchases) Purchases
FROM t1
JOIN Album al
    ON al.AlbumId = t1.AlbumId
JOIN Artist ar
    ON ar.ArtistId = al.ArtistId
GROUP BY 1
ORDER BY 2 DESC)

SELECT
    *
FROM t2
WHERE Purchases > (SELECT
    AVG(Purchases) Purchases
FROM t2);
```

```
/* Query 4 - Faturamento anual por mercado (Europa, América do Norte, América do Sul, Austrália e Índia) */
```

```
WITH t1
AS (SELECT
    i.BillingCountry Country,
    STRFTIME('%Y', i.InvoiceDate) TotalYear,
    SUM(il.UnitPrice * il.Quantity) TotalPrice
FROM Invoice i
JOIN InvoiceLine il
    ON i.InvoiceId = il.InvoiceId
JOIN Track t
    ON t.TrackId = il.TrackId
JOIN Genre g
    ON g.GenreId = t.GenreId
GROUP BY 1,
        2),
```

Euro

```
AS (SELECT
    TotalYear,
    SUM(TotalPrice) TotalPrice
FROM t1
WHERE Country IN ('Austria', 'Belgium', 'Czech Republic', 'Denmark', 'Finland',
'France', 'Germany', 'Hungary', 'Ireland', 'Italy', 'Netherlands', 'Norway',
'Poland', 'Portugal', 'Spain', 'Sweden', 'United Kingdom')
GROUP BY 1),
```

NAm

```
AS (SELECT
    TotalYear,
    SUM(TotalPrice) TotalPrice
FROM t1
WHERE Country IN ('USA', 'Canada')
GROUP BY 1),
```

SAm

```
AS (SELECT
    TotalYear,
    SUM(TotalPrice) TotalPrice
FROM t1
WHERE Country IN ('Argentina', 'Brazil', 'Chile')
GROUP BY 1),
```

Australia

```
AS (SELECT
    TotalYear,
    SUM(TotalPrice) TotalPrice
FROM t1
WHERE Country IN ('Australia')
GROUP BY 1),
```

India

```
AS (SELECT
    TotalYear,
    SUM(TotalPrice) TotalPrice
```

```
FROM t1
WHERE Country IN ('India')
GROUP BY 1)

SELECT
    Euro.TotalYear,
    COALESCE(Euro.TotalPrice, 0) Europe,
    COALESCE(NAm.TotalPrice, 0) USA_Canada,
    COALESCE(SAm.TotalPrice, 0) Argentina_Brazil_Chile,
    COALESCE(Australia.TotalPrice, 0) Australia,
    COALESCE(India.TotalPrice, 0) India
FROM Euro
LEFT JOIN NAm
    ON Euro.TotalYear = NAm.TotalYear
LEFT JOIN SAm
    ON Euro.TotalYear = SAm.TotalYear
LEFT JOIN Australia
    ON Euro.TotalYear = Australia.TotalYear
LEFT JOIN India
    ON Euro.TotalYear = India.TotalYear;
```