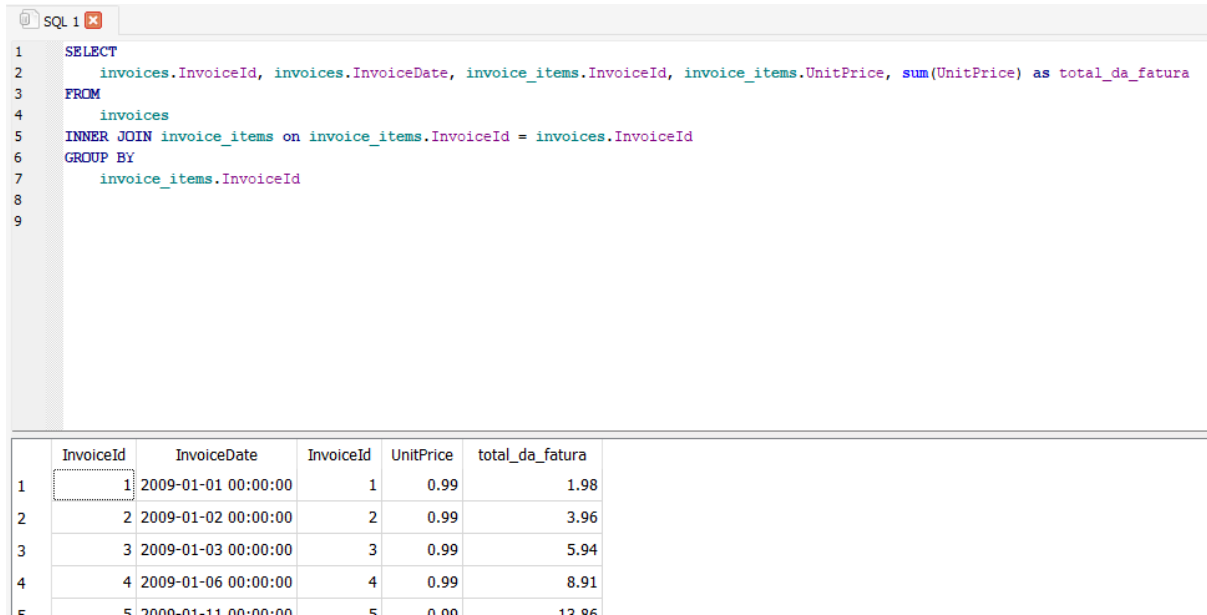


PROVA PRÁTICA BD 25.1

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1)



The screenshot shows a SQL query editor with a query that selects invoice details and calculates the total amount. The query is as follows:

```
1 SELECT
2     invoices.InvoiceId, invoices.InvoiceDate, invoice_items.InvoiceId, invoice_items.UnitPrice, sum(UnitPrice) as total_da_fatura
3 FROM
4     invoices
5 INNER JOIN invoice_items on invoice_items.InvoiceId = invoices.InvoiceId
6 GROUP BY
7     invoice_items.InvoiceId
8
9
```

Below the query, the results are displayed in a table with 6 columns: InvoiceId, InvoiceDate, InvoiceId, UnitPrice, and total_da_fatura. The table contains 5 rows of data.

	InvoiceId	InvoiceDate	InvoiceId	UnitPrice	total_da_fatura
1	1	2009-01-01 00:00:00	1	0.99	1.98
2	2	2009-01-02 00:00:00	2	0.99	3.96
3	3	2009-01-03 00:00:00	3	0.99	5.94
4	4	2009-01-06 00:00:00	4	0.99	8.91
5	5	2009-01-11 00:00:00	5	0.99	12.96

Está agrupado por invoice_items.invoiceid pois na tabela invoice_items os items tem um id unico pra cada que seria o InvoiceLineId mas também tem o Invoiceld onde os elementos podem ter o mesmo Id.

```
SELECT
    invoices.Invoiceld, invoices.InvoiceDate, invoice_items.Invoiceld,
    invoice_items.UnitPrice, sum(UnitPrice) as total_da_fatura
FROM
    invoices
INNER JOIN invoice_items on invoice_items.Invoiceld = invoices.Invoiceld
GROUP BY
    invoice_items.Invoiceld
```

InvoiceLineId	InvoiceId	TrackId	UnitPrice	Quantity
Filtro	Filtro	Filtro	Filtro	Filtro
1	1	2	0.99	1
2	1	4	0.99	1
3	2	6	0.99	1
4	2	8	0.99	1
5	2	10	0.99	1
6	2	12	0.99	1
7	3	16	0.99	1
8	3	20	0.99	1
9	3	24	0.99	1
10	3	28	0.99	1
11	3	32	0.99	1
12	3	36	0.99	1
13	4	42	0.99	1
14	4	48	0.99	1
15	4	54	0.99	1
16	4	60	0.99	1

Então os itens que tem o mesmo InvoiceId estão juntos e o total_da_fatura seria como o UnitPrice * quantidade de elementos que tem a mesma InvoiceId, a soma de todos os UnitPrice que pertencem a mesma InvoiceId.

2)

```
SELECT
    trackid,
    tracks.name AS Name,
    tracks.AlbumId AS AlbumId,
    albums.title AS Title,
    albums.ArtistId AS ArtistId,
    artists.name AS Name
FROM
    tracks
    INNER JOIN albums ON albums.albumid = tracks.albumid
    INNER JOIN artists ON artists.artistid = albums.artistid;
```

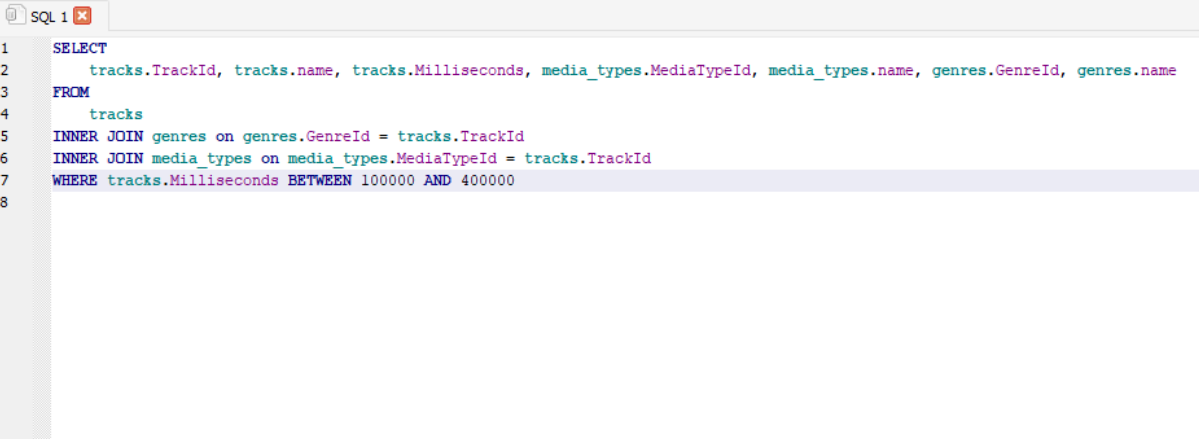
TrackId	Name	AlbumId	Title	ArtistId	Name
1	For Those About To Rock (We Salute You)	1	For Those About To Rock We Salute You	1	AC/DC
6	Put The Finger On You	1	For Those About To Rock We Salute You	1	AC/DC
7	Let's Get It Up	1	For Those About To Rock We Salute You	1	AC/DC
8	Inject The Venom	1	For Those About To Rock We Salute You	1	AC/DC
9	Snowballed	1	For Those About To Rock We Salute You	1	AC/DC
10	Evil Walks	1	For Those About To Rock We Salute You	1	AC/DC
11	C.O.D.	1	For Those About To Rock We Salute You	1	AC/DC
12	Breaking The Rules	1	For Those About To Rock We Salute You	1	AC/DC

```

SELECT
    trackid,
    tracks.name AS Name,
        tracks.AlbumId As AlbumId,
    albums.title AS Title,
        albums.ArtistId AS ArtistId,
    artists.name AS Name
FROM
    tracks
    INNER JOIN albums ON albums.albumid = tracks.albumid
    INNER JOIN artists ON artists.artistid = albums.artistid;

```

3)



The screenshot shows a SQL query editor with a query that selects track information and filters by duration. Below the editor is a table with the results of the query.

```

1 SELECT
2     tracks.TrackId, tracks.name, tracks.Milliseconds, media_types.MediaTypeId, media_types.name, genres.GenreId, genres.name
3 FROM
4     tracks
5 INNER JOIN genres on genres.GenreId = tracks.TrackId
6 INNER JOIN media_types on media_types.MediaTypeId = tracks.TrackId
7 WHERE tracks.Milliseconds BETWEEN 100000 AND 400000
8

```

	TrackId	Name	Milliseconds	MediaTypeId	Name	GenreId	Name
1	1	For Those About To Rock (We Salute You)	343719	1	MPEG audio file	1	Rock
2	2	Balls to the Wall	342562	2	Protected AAC audio file	2	Jazz
3	3	Fast As a Shark	230619	3	Protected MPEG-4 video file	3	Metal
4	4	Restless and Wild	252051	4	Purchased AAC audio file	4	Alternative & Punk

```

SELECT
    tracks.TrackId, tracks.name, tracks.Milliseconds, medi_types.MediaTypeId,
    media_types.name, genres.GenreId, genres.name
FROM
    tracks
    INNER JOIN genres on genres.GenreId = tracks.TrackId
    INNER JOIN media_types on media_types.MediaTypeId = tracks.TrackId
WHERE tracks.Milliseconds BETWEEN 100000 AND 400000

```