

### Task 3: SQL for Data Analysis

1. Find albums by a specific artist

➤ `SELECT * FROM Album`  
`WHERE ArtistId = 2;`

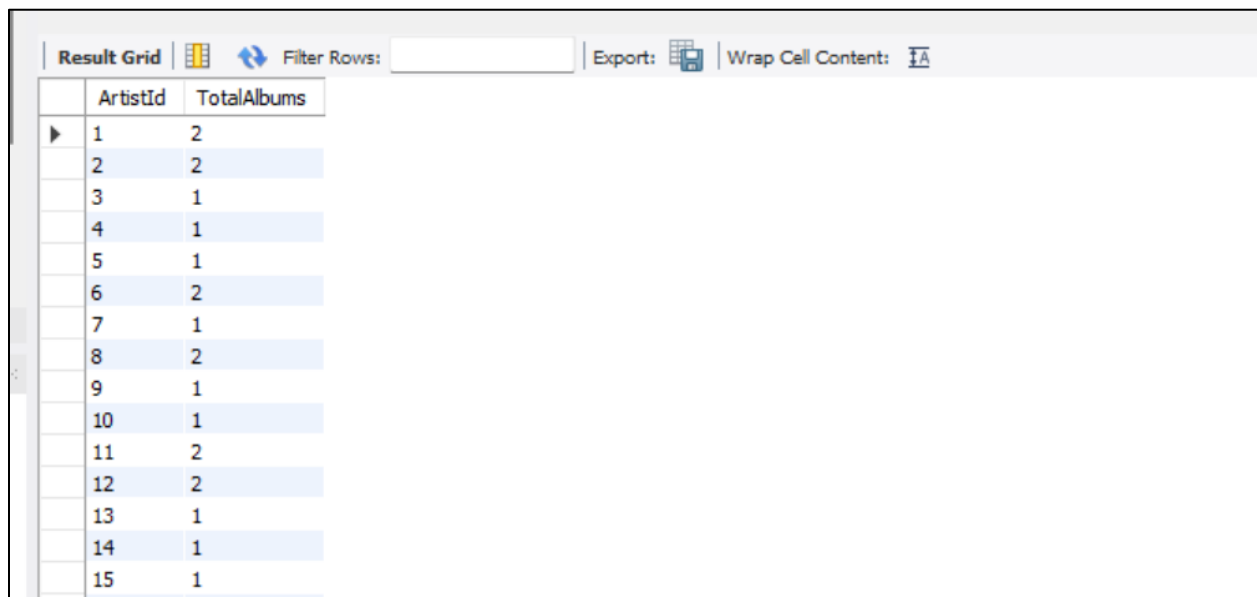


The screenshot shows a SQL query result grid with the following data:

	AlbumId	Title	ArtistId
▶	2	Balls to the Wall	2
	3	Restless and Wild	2

2. Count number of albums per artist

➤ `SELECT ArtistId, COUNT(*) AS TotalAlbums`  
➤ `FROM Album`  
➤ `GROUP BY ArtistId;`



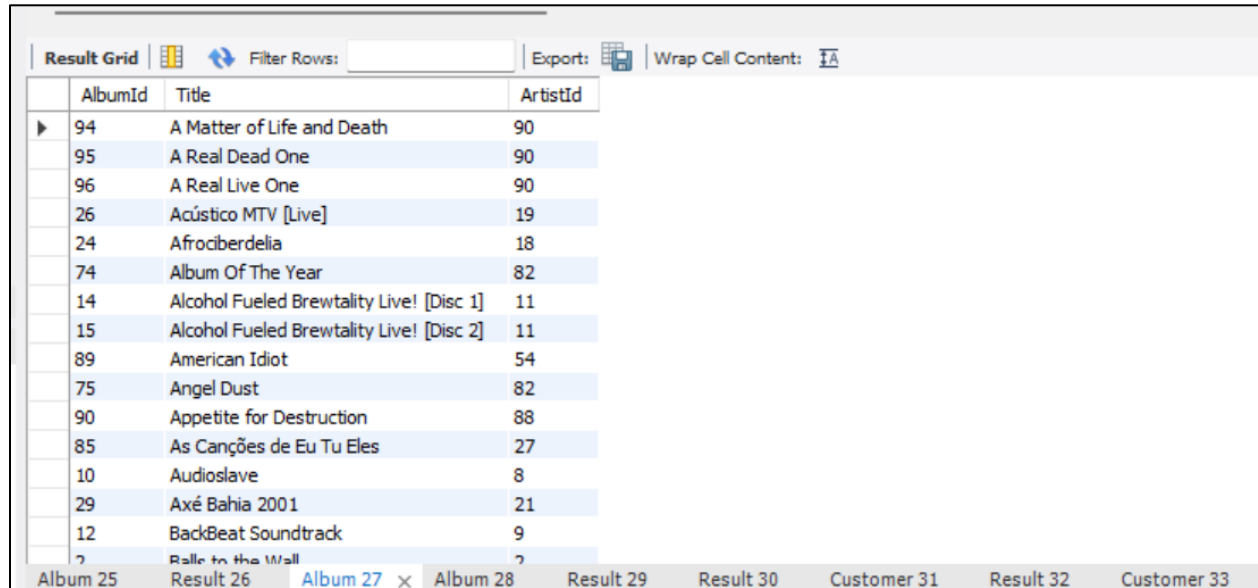
The screenshot shows a SQL query result grid with the following data:

	ArtistId	TotalAlbums
▶	1	2
	2	2
	3	1
	4	1
	5	1
	6	2
	7	1
	8	2
	9	1
	10	1
	11	2
	12	2
	13	1
	14	1
	15	1

3. Get albums ordered by title alphabetically

➤ SELECT \* FROM Album

➤ ORDER BY Title ASC;

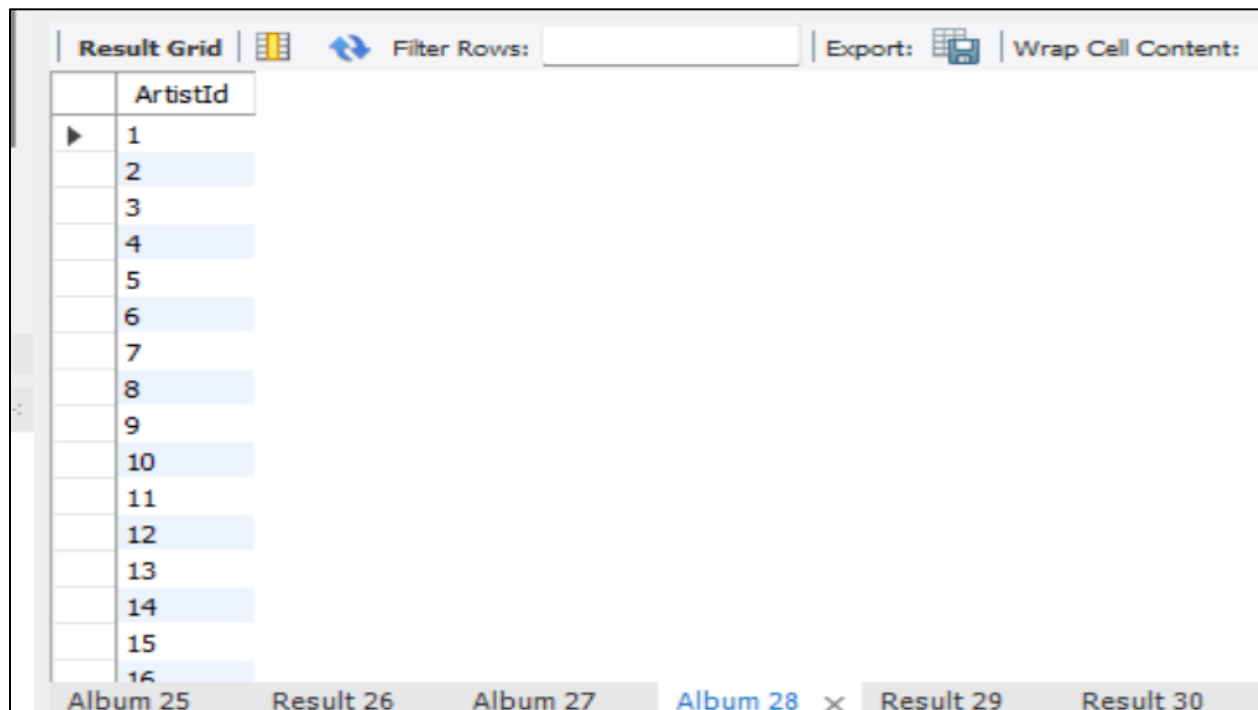


The screenshot shows a database application window with a 'Result Grid' tab. The grid displays a list of albums ordered by title in ascending order. The columns are 'AlbumId', 'Title', and 'ArtistId'. The first few rows are highlighted in blue. The bottom of the window shows a tab bar with 'Album 25' selected, and other tabs like 'Result 26', 'Album 27', 'Album 28', 'Result 29', 'Result 30', 'Customer 31', 'Result 32', and 'Customer 33'.

AlbumId	Title	ArtistId
94	A Matter of Life and Death	90
95	A Real Dead One	90
96	A Real Live One	90
26	Acústico MTV [Live]	19
24	Afrociberdelia	18
74	Album Of The Year	82
14	Alcohol Fueled Brewtality Live! [Disc 1]	11
15	Alcohol Fueled Brewtality Live! [Disc 2]	11
89	American Idiot	54
75	Angel Dust	82
90	Appetite for Destruction	88
85	As Canções de Eu Tu Eles	27
10	Audioslave	8
29	Axé Bahia 2001	21
12	BackBeat Soundtrack	9
7	Rolls to the Wall	7

4. Find distinct artist IDs

➤ SELECT DISTINCT ArtistId FROM Album;



The screenshot shows a database application window with a 'Result Grid' tab. The grid displays a list of distinct artist IDs. The column is 'ArtistId'. The first few rows are highlighted in blue. The bottom of the window shows a tab bar with 'Album 25' selected, and other tabs like 'Result 26', 'Album 27', 'Album 28', 'Result 29', and 'Result 30'.

ArtistId
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

5. Get All Albums with Artist Name

- SELECT Album.AlbumId, Album.Title, Artist.Name AS ArtistName
- FROM Album
- JOIN Artist ON Album.ArtistId = Artist.ArtistId;

Result Grid			
Filter Rows:		Export:	Wrap Cell Content: <a href="#">IA</a>
	AlbumId	Title	ArtistName
▶	4	Let There Be Rock	AC/DC
	1	For Those About To Rock We Salute You	AC/DC
	3	Restless and Wild	Accept
	2	Balls to the Wall	Accept
	5	Big Ones	Aerosmith
	6	Jagged Little Pill	Alanis Morissette
	7	Facelift	Alice In Chains
	34	Chill: Brazil (Disc 2)	Antônio Carlos Jobim
	8	Warner 25 Anos	Antônio Carlos Jobim
	9	Plays Metallica By Four Cellos	Apocalyptica
	11	Out Of Exile	Audioslave
	10	Audioslave	Audioslave
	12	BackBeat Soundtrack	BackBeat
	13	The Best Of Billy Cobham	Billy Cobham
	15	Alcohol Fueled Brutality Live! [Disc 2]	Black Label Society
	14	Alcohol Fueled Brutality Live! [Disc 1]	Black Label Society

6. Count of Albums by Each Artist

- SELECT Artist.Name, COUNT(\*) AS AlbumCount
- FROM Album
- JOIN Artist ON Album.ArtistId = Artist.ArtistId
- GROUP BY Artist.Name
- ORDER BY AlbumCount DESC;

Result Grid		
Filter Rows:		Export: <a href="#">IA</a>
	Name	AlbumCount
▶	Deep Purple	11
	Iron Maiden	7
	Various Artists	4
	Foo Fighters	4
	Faith No More	4
	Gilberto Gil	3
	Guns N' Roses	3
	AC/DC	2
	Accept	2
	Caetano Veloso	2
	Antônio Carlos...	2
	Audioslave	2
	Led Zeppelin	2
	Chico Science ...	2
	Black Label Soc...	2
	Black Sabbath	2

7. List All Customers From a Specific Country

- SELECT \* FROM Customer
- WHERE Country = 'USA';

Result Grid   Filter Rows:   Export:   Wrap Cell Content:										
	CustomerId	FirstName	LastName	Company	Address	City	State	Country	PostalCode	
▶	16	Frank	Harris	Google Inc.	1600 Amphitheatre Parkway	Mountain View	CA	USA	94043-1351	+
	17	Jack	Smith	Microsoft Corporation	1 Microsoft Way	Redmond	WA	USA	98052-8300	+
	18	Michelle	Brooks		627 Broadway	New York	NY	USA	10012-2612	+
	19	Tim	Goyer	Apple Inc.	1 Infinite Loop	Cupertino	CA	USA	95014	+
	20	Dan	Miller		541 Del Medio Avenue	Mountain View	CA	USA	94040-111	+
	21	Kathy	Chase		801 W 4th Street	Reno	NV	USA	89503	+
	22	Heather	Leacock		120 S Orange Ave	Orlando	FL	USA	32801	+
	23	John	Gordon		69 Salem Street	Boston	MA	USA	2113	+
	24	Frank	Ralston		162 E Superior Street	Chicago	IL	USA	60611	+
	25	Victor	Stevens		319 N. Frances Street	Madison	WI	USA	53703	+
	26	Richard	Cunning...		2211 W Berry Street	Fort Worth	TX	USA	76110	+
	27	Patrick	Gray		1033 N Park Ave	Tucson	AZ	USA	85719	+
	28	Julia	Barnett		302 S 700 E	Salt Lake City	UT	USA	84102	+

8. Count Customers per Country

- SELECT Country, COUNT(\*) AS TotalCustomers
- FROM Customer
- GROUP BY Country
- ORDER BY TotalCustomers DESC;

Result Grid   Filter Rows:   Export:   Wrap Cell Content:		
	Country	TotalCustomers
▶	USA	13
	Canada	8
	Brazil	5
	France	5
	Germany	4
	United Kingdom	3
	Czech Republic	2
	Portugal	2
	India	2
	Norway	1
	Austria	1
	Belgium	1
	Denmark	1
	Finland	1
	Hungary	1
	Ireland	1

### 9. Full Customer Info With No Company Listed

- SELECT \* FROM Customer
- WHERE Company IS NULL OR Company = '';

CustomerId	FirstName	LastName	Company	Address	City	State	Country	PostalCode	Phone
2	Leonie	Köhler		Theodor-Heuss-Straße 34	Stuttgart		Germany	70174	+49
3	François	Tremblay		1498 rue Bélanger	Montréal	QC	Canada	H2G 1A7	+1
4	Bjørn	Hansen		Ullevålsveien 14	Oslo		Norway	0171	+47
6	Helena	Holý		Rilská 3174/6	Prague		Czech Republic	14300	+42
7	Astrid	Gruber		Rotenturmstraße 4, 1010 Innere Stadt	Vienne		Austria	1010	+43
8	Daan	Peeters		Grétrystraat 63	Brussels		Belgium	1000	+32
9	Kara	Nielsen		Sønder Boulevard 51	Copenhagen		Denmark	1720	+45
13	Fernanda	Ramos		Qe 7 Bloco G	Brasilia	DF	Brazil	71020-677	+55
18	Michelle	Brooks		627 Broadway	New York	NY	USA	10012-2612	+1
20	Dan	Miller		541 Del Medio Avenue	Mountain View	CA	USA	94040-111	+1
21	Kathy	Chase		801 W 4th Street	Reno	NV	USA	89503	+1
22	Heather	Leacock		120 S Orange Ave	Orlando	FL	USA	32801	+1
23	John	Gordon		69 Salem Street	Boston	MA	USA	2113	+1
24	Frank	Ralston		162 E Superior Street	Chicago	IL	USA	60611	+1
25	Victor	Savane		310 N. Francis Street	Madison	WI	USA	53703	+1

### 10. Create a View for Customers and Their Locations

- CREATE VIEW CustomerLocations AS
- SELECT CustomerId, FirstName, LastName, City, Country
- FROM Customer;

CustomerId	FirstName	LastName	City	Country
1	Luis	Gonçalves	São José dos Campos	Brazil
2	Leonie	Köhler	Stuttgart	Germany
3	François	Tremblay	Montréal	Canada
4	Bjørn	Hansen	Oslo	Norway
5	František	Wichterlová	Prague	Czech Republic
6	Helena	Holý	Prague	Czech Republic
7	Astrid	Gruber	Vienne	Austria
8	Daan	Peeters	Brussels	Belgium
9	Kara	Nielsen	Copenhagen	Denmark
10	Eduardo	Martins	São Paulo	Brazil
11	Alexandre	Rocha	São Paulo	Brazil
12	Roberto	Almeida	Rio de Janeiro	Brazil
13	Fernanda	Ramos	Brasília	Brazil
14	Mark	Philips	Edmonton	Canada
15	Jennifer	Peterson	Vancouver	Canada
16	Frank	Harris	Mountain View	USA