17.05.2021

SELECT ALL COLUMNS FROM TRACKS TABLE

**SELECT \***

**FROM tracks;**

SELECT ONLY FOLLOWING COLUMNS FROM TRACKS TABLE: Name, Composer, UnitPrice

**SELECT Name, Composer, UnitPrice**

**FROM tracks;**

HOW MANY RECORDS ARE THERE IN TRACKS TABLE?

**SELECT COUNT(TrackId)**

**FROM tracks;**

3503

HOW MANY RECORDS ARE THERE IN ARTISTS TABLE?

**SELECT COUNT(ArtistId)**

**FROM artists;**

275

HOW MANY DIFFERENT/DISTINCT PRICES ARE THERE IN TRACKS TABLE

**SELECT COUNT(DISTINCT UnitPrice)**

**FROM tracks;**

2

WHAT IS THE TITLE OF THE ALBUM WITH ALBUMID=3

**SELECT Title**

**FROM albums**

**WHERE AlbumId = 3;**

Restless and Wild

What is the ArtistID of Metallica?

**SELECT ArtistId**

**FROM artists**

**WHERE name = "Metallica";**

50

How many albums does Metallica have? List them all

**SELECT Title, COUNT(AlbumId)**

**FROM albums**

**WHERE ArtistId = (SELECT ArtistId FROM artists WHERE name = "Metallica")**

**GROUP BY Title;**

10

Albums has different tracks in it. How many tracks does Metallica's "Master Of Puppets" album has? List all columns.

(We have found that "Master Of Puppets" album has AlbumId=152)

**SELECT \*, COUNT(TrackId)**

**FROM tracks**

**WHERE AlbumId = (SELECT AlbumId FROM albums WHERE Title = "Master Of Puppets");**

8

List all the tracks IDs and Names in Metallica's following albums

**SELECT Title FROM albumsWHERE ArtistId = (SELECT ArtistIdFROM artistsWHERE name = "Metallica");**

**Correct Solution:**

**FROM tracksWHERE AlbumId IN (SELECT AlbumId FROM albumsINNER JOIN artists on albums.ArtistId=artists.ArtistIdWHERE albums.ArtistId=50);**

Order the results of tracks in "Master Of Puppets" album A-Z according to column "Name"

**SELECT \*, COUNT(TrackId)**

**FROM tracks**

**WHERE AlbumId = (SELECT AlbumId FROM albums WHERE Title = "Master Of Puppets")**

**ORDER BY name;**

Bring the TrackId and Name of tracks in "Master Of Puppets" album with TrackID between 1854 and 1858

**SELECT TrackId, name**

**FROM tracks**

**WHERE TrackId BETWEEN 1854 AND 1858 AND AlbumId = (**

**SELECT AlbumId**

**FROM albums**

**WHERE Title = "Master Of Puppets");**

Bring the record with Minimum-Size in Bytes from tracks in "Master Of Puppets" album

**SELECT MIN(Bytes)FROM tracksWHERE AlbumId = 152;**

Bring the record with Maximum-Size in Bytes from tracks in "Master Of Puppets" album

SELECT MAX(Bytes)FROM tracksWHERE AlbumId = 152;

Bring all records from tracks table and present every AlbumID and the max size-bytes track on it.

**SELECT AlbumId, MAX(Bytes)FROM tracksGROUP BY AlbumId;**

Bring all records from tracks table and present every AlbumID and the min size-bytes track on it.

**SELECT AlbumId, MIN(Bytes)FROM tracksGROUP BY AlbumId;**

What is the sum of all tracks cost?

SELECT SUM(UnitPrice)FROM tracks;

What is the avg price of all tracks cost?

**SELECT ROUND(AVG(UnitPrice),3)FROM tracks;**

What is the sum of each album cost?

**SELECT AlbumId, name, SUM(UnitPrice)FROM tracksGROUP BY AlbumId;**

What is the average size of tracks in each album?

**SELECT AlbumId, ROUND(AVG(Bytes), 3)FROM tracksGROUP BY AlbumId;**

How many tracks have each album?

**SELECT AlbumId, name, COUNT(TrackId)FROM tracksGROUP BY AlbumId;**

What is the AlbumID of the album with most track in it

**SELECT AlbumId, name, MAX(total)FROM (SELECT AlbumId, name, COUNT(TrackId) AS totalFROM tracksGROUP BY AlbumId);**

At the beginning of the lesson, we have used the queries below:

SELECT \* FROM artists WHERE NAME = 'Metallica' (We have found that Metallica has ArtistID=50)

SELECT \* FROM albums WHERE ArtistId = 50 (We have found the 10 albums of Metallica with ArtistID=50)

AlbumId Title ArtistId

35 Garage Inc. (Disc 1) 50

148 Black Album 50

149 Garage Inc. (Disc 2) 50

150 Kill 'Em All 50

151 Load 50

152 Master Of Puppets 50

153 ReLoad 50

154 Ride The Lightning 50

155 St. Anger 50

156 ...And Justice For All 50

Let's find all the tracks of Metallica

Result: 112 rows. Just as same as we have found above.

FROM tracksWHERE AlbumId IN (SELECT AlbumId FROM albumsINNER JOIN artists on albums.ArtistId=artists.ArtistIdWHERE albums.ArtistId=50);

How many tracks has Metallica sold to each country?

SELECT DISTINCT BillingCountry, SUM(Quantity)FROM invoice\_items InvItemsINNER JOIN invoices Inv ON InvItems.InvoiceId=Inv.InvoiceId WHERE TrackId IN (SELECT TrackId FROM tracks WHERE AlbumId IN (SELECT AlbumID FROM albums al INNER JOIN artists ar on al.ArtistId=ar.ArtistId WHERE al.ArtistId=50))GROUP BY BillingCountry;