

Raspberry Pi

Retrieving data from more than one table

Introduction

For this activity you will need:

- DB Browser for SQLite
- A **copy** of the dbMusic.db file which you used last lesson
- Your **Activity 1 worksheet** to remind you of the operators

Code snippet

Select the Surname, Download, and Title columns from the Members, Downloads, and Tracks tables. Specify the links between the three tables and retrieve the data for Member 1.

```
1 SELECT tblMembers.Surname, tblDownloads.DownlID,  
2    tblTracks.Title  
3 FROM tblMembers, tblDownloads, tblTracks  
4 WHERE tblMembers.MemberID = tblDownloads.MemberID  
5 AND tblTracks.TrackID = tblDownloads.TrackID  
6 AND tblMembers.Surname = "Bibi";
```

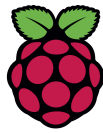
Task Retrieve data from more than one table

For each question, design an SQL search that will reveal the answer.

Question 1: How many tracks has Percy Winn downloaded?

Note: there will be slight variations in learner answers.

Answer 16



Raspberry Pi

Code

```
SELECT tblMembers.Firstname, tblMembers.Surname,  
tblTracks.Title  
FROM tblMembers, tblDownloads, tblTracks  
WHERE tblMembers.MemberID = tblDownloads.MemberID  
AND tblTracks.TrackID = tblDownloads.TrackID  
AND tblMembers.Firstname = "Percy"  
AND tblMembers.Surname = "Winn";
```

Question 2: How many pop tracks were downloaded in the year 2012?

Note: there will be slight variations in learner answers.

Answer

8

Code

```
SELECT tblTracks.Genre  
FROM tblMembers, tblDownloads, tblTracks  
WHERE tblMembers.MemberID = tblDownloads.MemberID  
AND tblTracks.TrackID = tblDownloads.TrackID  
AND tblTracks.Genre = "Pop"  
AND tblDownloads.Date BETWEEN "2012-01-01" AND  
"2012-12-31";
```

Question 3: What was the title of the first track downloaded in 2014?

Note: there will be slight variations in learner answers.

Answer

My bubble

Code

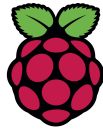
```
SELECT tblTracks.Title, tblDownloads.Date  
FROM tblMembers, tblDownloads, tblTracks  
WHERE tblMembers.MemberID = tblDownloads.MemberID  
AND tblTracks.TrackID = tblDownloads.TrackID  
AND tblDownloads.Date BETWEEN "2014-01-01" AND  
"2014-12-31"  
ORDER BY tblDownloads.Date ASC;
```

Question 4: How many times has the track Stomp by The Kings been downloaded?

Note: there will be slight variations in learner answers.

Answer

12



Code

```
SELECT tblTracks.Title
FROM tblMembers, tblDownloads, tblTracks
WHERE tblMembers.MemberID = tblDownloads.MemberID
AND tblTracks.TrackID = tblDownloads.TrackID
AND tblTracks.Title = "Stomp" AND tblTracks.Artist =
"The Kings";
```

Question 5: How many downloads did Nadim Abe make after 1st January 2013?

Note: there will be slight variations in learner answers.

Answer

18

Code

```
SELECT tblTracks.Title, tblMembers.Firstname,
tblMembers.Surname, tblDownloads.Date;
FROM tblMembers, tblDownloads, tblTracks
WHERE tblMembers.MemberID = tblDownloads.MemberID
AND tblTracks.TrackID = tblDownloads.TrackID
AND tblMembers.Firstname = "Nadim" AND
tblMembers.Surname = "Abe"
AND tblDownloads.Date > "2013-01-01";
```

Explorer task

Design and execute your own SQL searches. They must retrieve data from more than one table.

Resources are updated regularly — the latest version is available at: ncce.io/tcc.

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