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 table. Specify the links between the three tables and retrieve the data for Member 1.**

|  |  |
| --- | --- |
| 1  .  3  4  5  6 | SELECT tblMembers.Surname, tblDownloads.DownlID, tblTracks.Title  FROM tblMembers, tblDownloads, tblTracks  WHERE tblMembers.MemberID = tblDownloads.MemberID  AND tblTracks.TrackID = tblDownloads.TrackID  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 to learner answers.*

|  |  |
| --- | --- |
| **Answer** | 16 |
| **Code** | SELECT tblMembers.Surname, tblDownloads.DownlID, tblTracks.Title  FROM tblMembers, tblDownloads, tblTracks  WHERE tblMembers.MemberID = tblDownloads.MemberID  AND tblTracks.TrackID = tblDownloads.TrackID  AND tblMembers.Surname = "Winn"  AND tblMembers.Firstname = "Percy"; |

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

*Note: there will be slight variations to learner answers.*

|  |  |
| --- | --- |
| **Answer** | 20 |
| **Code** | SELECT tblTracks.Genre, tblDownloads.TrackID, tblDownloads.Date  FROM tblMembers, tblDownloads, tblTracks  WHERE tblMembers.MemberID = tblDownloads.MemberID  AND tblDownloads.Date BETWEEN "2012" AND "2013"  AND tblTracks.TrackID = tblDownloads.TrackID  AND tblTracks.Genre = "Pop"; |

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

*Note: there will be slight variations to learner answers.*

|  |  |
| --- | --- |
| **Answer** | My bubble |
| **Code** | SELECT tblTracks.Title, tblDownloads.Date  FROM tblMembers, tblDownloads, tblTracks  WHERE tblMembers.MemberID = tblDownloads.MemberID AND tblDownloads.Date BETWEEN "2014-01-01" AND "2014-12-31"  AND tblTracks.TrackID = tblDownloads.TrackID  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 to learner answers.*

|  |  |
| --- | --- |
| **Answer** | 12 |
| **Code** | SELECT tblTracks.Title, tblTracks.Artist  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 to learner answers.*

|  |  |
| --- | --- |
| **Answer** | 18 |
| **Code** | SELECT tblMembers.Firstname, tblMembers.Surname, tblDownloads.Date  FROM tblMembers, tblDownloads, tblTracks  WHERE tblMembers.MemberID = tblDownloads.MemberID AND tblDownloads.Date > "2013-01-01"  AND tblTracks.TrackID = tblDownloads.TrackID  AND tblMembers.Firstname = "Nadim"  AND tblMembers.Surname = "Abe" |

# Explorer task .

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