Explore a database

# Introduction

For this activity you will need:

* DB Browser for SQLite
* A **copy** of the dbMusic.db file which is located here: **TEACHER ADD THE LOCATION HERE.**

### Task Investigate the tables

**Step 1**

Look at the data structure of the tblDownloads table. State whether the fields listed below are primary or foreign keys.

| **Field** | **Primary Key / Foreign Key** |
| --- | --- |
| DownLID | Primary Key |
| TrackID | Foreign Key |
| MemberID | Foreign Key |

**Step 2**

Choose to **modify** the tblTracks table. Paste the SQL code for the table below:

| CREATE TABLE "tblTracks" (  "TrackID" INTEGER NOT NULL UNIQUE,  "Title" TEXT,  "Artist" TEXT,  "Genre" TEXT,  PRIMARY KEY("TrackID" AUTOINCREMENT)  ); |
| --- |

**Step 3**

Choose to **modify** the tblDownloads table. What is the data type used for data and time?

| TEXT |
| --- |

### Task Explore the members table.

**Step 1**

Go to the **browse data** tab and select the tblMembers table from the drop down list.

**Step 2**

How many **records** does the **members table** have?

| 55 |
| --- |

**Step 3**

What is the **name** of the **39th member**?

| Pepper Wynnie |
| --- |

**Step 4**

What is the **email address** for **Peony Winifred**?

| khc@mail.co.uk |
| --- |

**Step 5**

How many **members** have a **surname** that begins with the letter B?

| 11 |
| --- |

**Step 6**

How many **fields** does the members table have?

| 5 |
| --- |

### 

### Task Explore the downloads table

**Step 1**

Go to the tblDownloads table. How many **records** does the **downloads** table have?

| 1000 |
| --- |

**Step 2**

How many **fields** does the **downloads** table have?

| 5 |
| --- |

**Step 2**

What structure has been used to store the data in the **date** field?

| YYYY-MM-DD |
| --- |

**Step 3**

What structure has been used to store the data in the **time** field?

| HH:MM |
| --- |

**Step 4**

How many **downloads** of **track 13** have there been?

**Tip:** Use the filter at the top of the table data

| 14 |
| --- |

**Step 5**

What is the title of **track 13**?

**Tip:** you will need to navigate to the tracks table

| Cheese pops |
| --- |

### Explorer task .

**Step 1**

Go to the **Execute SQL** tab and enter the SQL code below:

| SELECT \*  FROM tblDownloads  WHERE date BETWEEN 2011 AND 2013; |
| --- |

**Step 2**

Click on the play icon to execute the code. Take a look at what is returned by the SQL code.

**Step 3**

Modify the code to search for data from different years.

Resources are updated regularly — the latest version is available at: [ncce.io/tcc](http://ncce.io/tcc).

This resource is licensed under the Open Government Licence, version 3. For more information on this licence, see [ncce.io/ogl](http://ncce.io/ogl).