

Raspberry Pi

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

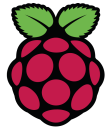
Look at the data structure of the **tblDownloads** table. State whether the fields listed below are primary or foreign keys.

Field	Primary Key / Foreign Key
DownLID	Primary
TrackID	Foreign
MemberID	Primary

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)  
);
```



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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

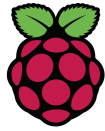
What is the **name** of the **39th member**?

Pepper Wynn timer

Step 4

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

khc@mail.co.uk



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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

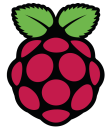
Step 3

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

text

Step 4

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



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text

Step 5

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

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

26

Step 6

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

Tip: you will need to navigate to the tracks table

Cheese pops

Explorer task

Step 1

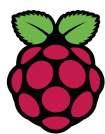
Go to the **Execute SQL** tab and enter the SQL code below:

```
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



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Modify the code to search for data from different years.

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

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