

Mutual Friends

<https://advancedsqlpuzzles.com>

For this puzzle, we are going to find the number of mutual friends given the below dataset.

This puzzle is difficult; the trick is to think in sets and not code.

It should be noted that these types of problems are best solved using a [graph database](#), but for this puzzle we will be using a traditional RDBMS system.

[I have coded the answer here along with a breakdown of the steps I use to achieve the result set. Hint, I broke the puzzle down into multiple sets/steps to achieve the final output.](#)

Remember to think in sets and not code! I can't stress this enough.

Given the following connections, determine the number of mutual connections between the friends.

| Friend 1 | Friend 2 |
|----------|----------|
| Jason | Mary |
| Mike | Mary |
| Mike | Jason |
| Susan | Jason |
| John | Mary |
| Susan | Mary |

Here is the result set you want to achieve.

| Friend 1 | Friend 2 | Mutual Friends |
|----------|----------|----------------|
| Jason | Mary | 2 |
| John | Mary | 0 |
| Jason | Mike | 1 |
| Mary | Mike | 1 |
| Jason | Susan | 1 |
| Mary | Susan | 1 |

Jason and Mary have 2 mutual friends: Mike and Susan.

John and Mary have 0 mutual friends.

Jason and Mike have 1 mutual friend: Mary.

And so forth.....

I also have the answer saved in my GitHub repository. Link is below.

[GitHub – Mutual Friends](#)

Happy Coding!