Challenge 7: The Wordiest Author

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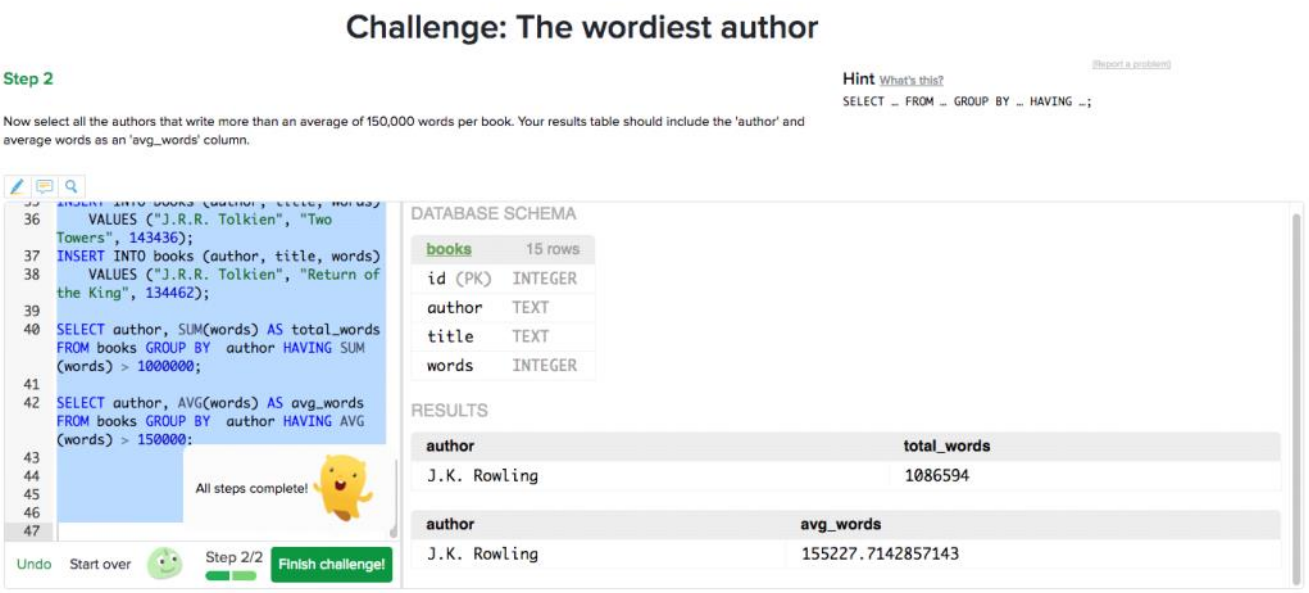

Step 1

We've created a database of a few popular authors and their books, with word counts for each book.

In this first step, select all the authors who have written more than 1 million words, using GROUP BY and HAVING.

Your results table should include the 'author' and their total word count as a 'total_words' column.

```
CREATE TABLE books (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    author TEXT,
    title TEXT,
    words INTEGER);

INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Philosopher's Stone", 79944);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Chamber of Secrets", 85141);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Prisoner of Azkaban", 107253);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Goblet of Fire", 190637);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Order of the Phoenix", 257045);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Half-Blood Prince", 168923);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Deathly Hallows", 197651);

INSERT INTO books (author, title, words)
    VALUES ("Stephenie Meyer", "Twilight", 118501);
INSERT INTO books (author, title, words)
    VALUES ("Stephenie Meyer", "New Moon", 132807);
INSERT INTO books (author, title, words)
    VALUES ("Stephenie Meyer", "Eclipse", 147930);
INSERT INTO books (author, title, words)
    VALUES ("Stephenie Meyer", "Breaking Dawn", 192196);

INSERT INTO books (author, title, words)
    VALUES ("J.R.R. Tolkien", "The Hobbit", 95022);
INSERT INTO books (author, title, words)
    VALUES ("J.R.R. Tolkien", "Fellowship of the Ring", 177227);
INSERT INTO books (author, title, words)
    VALUES ("J.R.R. Tolkien", "Two Towers", 143436);
INSERT INTO books (author, title, words)
    VALUES ("J.R.R. Tolkien", "Return of the King", 134462);

SELECT author, SUM(words) AS total_words FROM books GROUP BY  author HAVING
SUM(words) > 1000000;
```

DATABASE SCHEMA

books 15 rows
id (PK)INTEGER
authorTEXT
titleTEXT
wordsINTEGER

RESULTS

author	total_words
J.K. Rowling	1086594

OTHER ATTEMPTS

```
/** GOOD **/
SELECT author, words AS total_words FROM books GROUP BY author;

SELECT author, SUM(words) AS total_words FROM books GROUP BY
author HAVING SUM(words) > 1000000;

SELECT author, words AS total_words FROM books GROUP BY author
HAVING SUM(words) > 1000000;
```

```
/** BROKEN CODE
 SELECT author, words FROM books  WHERE  words >100000 GROUP BY
author;


 SELECT author, words FROM (SELECT author, words AS total_words
FROM books  HAVING words >1000000 GROUP BY author);

SELECT author, words AS total_words FROM books GROUP BY author
HAVING SUM(words) > 1000000;
 **/
```

Step 2

Now select all the authors that write more than an average of 150,000 words per book. Your results table should include the 'author' and average words as an 'avg_words' column.

```
CREATE TABLE books (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    author TEXT,
    title TEXT,
    words INTEGER);

INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Philosopher's Stone", 79944);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Chamber of Secrets", 85141);
INSERT INTO books (author, title, words)
    VALUES ("J.K. Rowling", "Harry Potter and the Prisoner of Azkaban", 107253);
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    VALUES ("J.R.R. Tolkien", "The Hobbit", 95022);
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    VALUES ("J.R.R. Tolkien", "Two Towers", 143436);
INSERT INTO books (author, title, words)
    VALUES ("J.R.R. Tolkien", "Return of the King", 134462);

SELECT author, SUM(words) AS total_words FROM books GROUP BY  author HAVING
SUM(words) > 1000000;

SELECT author, AVG(words) AS avg_words FROM books GROUP BY  author HAVING
AVG(words) > 150000;
```

DATABASE SCHEMA

books
15 rows

id (PK)INTEGER
authorTEXT
titleTEXT
wordsINTEGER

RESULTS

author	total_words
J.K. Rowling	1086594

author	avg_words
J.K. Rowling	155227.7142857143