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M5.2 Assignment  
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MySQL Functions – CHAR\_LENGTH, CHARACTER\_LENGTH, and LENGTH

For this assignment, the database created is called: **smithson\_functions**

A screenshot of a computer

AI-generated content may be incorrect.

Before I could utilize any of the function examples, I had to create samples to work with. This turned into a learning moment, realizing that multiple lines required a ‘,’ at the end to add more lines:

A computer screen with white text

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Although CHAR\_LENGTH(), CHARACTER\_LENGTH(), AND LENGTH() all appear to produce the same results in this example, they are not identical on purpose. Both CHAR\_LENGTH() AND CHARACTER\_LENGTH() count the number of characters in a string, and in MySQL, they are exact synonyms.

CHAR\_LENGTH() & CHARACTER\_LENGTH():

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Length(), on the other hand, counts the number of **bytes** used to store the string. For standard English text, each character is stored as a single byte, so all three functions return the same values in this example.

LENGTH():

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The difference becomes clear when working with multibyte characters (such as emojis or non-Latin scripts), where LENGTH() returns a higher number because those characters occupy more bytes. Additionally, CHARACTER\_LENGTH() aligns with the SQL standard, which can make it preferable for code intended to work across different database systems (MySQL, 2024).

References:

MySQL. (2024). *INSERT syntax*. In *MySQL 8.0 Reference Manual*. Retrieved from https://dev.mysql.com/doc/refman/8.0/en/insert.html

MySQL. (2024). *String functions and operators*. In *MySQL 8.0 Reference Manual*. Retrieved from https://dev.mysql.com/doc/refman/8.0/en/string-functions.html