

A modern conference room with large windows and a long table. The room is empty, with several office chairs arranged around the table. The view outside the windows shows a cityscape. The text "String Data Types" is overlaid in the center of the image.

String Data Types

String Data Types

- String - the text format in SQL

‘James’ - a variable of the string data type

= a variable of the alphanumeric data type

String Data Types

<u>string data type</u>		<u>Storage</u>	<u>Example</u>
<i>character</i>	CHAR	fixed	CHAR(5)

String Data Types

<u>string data type</u>		<u>Storage</u>	<u>Example</u>	<u>Length</u> (symbols)	<u>size</u> (bytes)
<i>character</i>	CHAR	fixed	CHAR(5) 'James' 'Bob'	5 3	5 5

CHAR(5)

5 represents the maximum number of symbols you are allowed to use in writing a value in this format

String Data Types

<u>string data type</u>		<u>Storage</u>	<u>Example</u>	<u>Length</u> (symbols)	<u>size</u> (bytes)
<i>character</i>	CHAR	fixed	CHAR(5) 'James' 'Bob'	5 3	5 5
<i>variable character</i>	VARCHAR	variable	VARCHAR(5) 'James' 'Bob'	5 3	5 3

String Data Types

<u>string data type</u>		<u>Maximum size</u> (bytes)	
<i>character</i>	CHAR	255	
<i>variable character</i>	VARCHAR	65,535	

String Data Types

<u>string data type</u>		<u>Maximum size</u> (bytes)	
<i>character</i>	CHAR	255	50% faster
<i>variable character</i>	VARCHAR	65,535	a lot more responsive to the data value inserted

String Data Types

Companies			
company_id	headquarters_phone_number	company	
1	+1 (202) 555-0196	COA	
2	+1 (202) 555-0152	COB	
3	+1 (229) 853-9913	COC	
4	+1 (618) 369-7392	COD	

company CHAR(3)

Password:

the symbols cannot be more than
10 characters

password VARCHAR(10)

String Data Types

<u>string data type</u>		<u>Example</u>
<i>character</i>	CHAR	CHAR(5)
<i>variable character</i>	VARCHAR	VARCHAR(5)
<i>ENUM</i> (“enumerate”)	ENUM	ENUM('M', 'F') <div>ERROR</div>

MySQL will show an error if you attempt to insert any value different from “M” or “F”.