

### 3. MySql – Data types

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### 3. MySql – Data types

#### 1. Data

- ✓ Data is collection of facts.
- ✓ Facts can be values like numbers, strings, alphanumeric, symbols.
- ✓ So, every value having different data type

#### 2. Data type

- ✓ We can create a table in database.
- ✓ Table having data in the form of rows and column.
- ✓ Each column in a table is required to have a **name** and a **data type**.
- ✓ Every column can hold the different type of data like, integer, float, character, strings, date and time etc.

### 3. String data types

- ✓ A group of characters is called as a String.
- ✓ To represent group of characters, String data type helps.

Data Type	Description
✓ CHAR	<ul style="list-style-type: none"><li>✓ It can store group or characters in the form of letters, numbers, and special characters as well.</li><li>✓ The column length is 0 to 255.</li></ul>
✓ VARCHAR	<ul style="list-style-type: none"><li>✓ It can store group or characters in the form of letters, numbers, and special characters as well.</li><li>✓ The column length is 0 to 65535.</li></ul>
✓ We do have other string data types but not much important as part of our sessions. Thanks for understanding.	

### 4. Numeric data types

- ✓ There are two types of numeric data types.
  - Int/integer : Value without decimal
  - Double : Value with decimal

Data Type	Description
✓ INT	<ul style="list-style-type: none"><li>✓ A number without decimal values.</li><li>✓ The column length is from - 2147483648 to + 2147483647</li></ul>
✓ FLOAT	<ul style="list-style-type: none"><li>✓ A number with decimal values.</li></ul>
✓ We do have other numeric data types but not much important as part of our sessions.	

### 5. Date and Time data types

- ✓ By using these data types we can store Date and time values in table columns.

Data Type	Description
✓ DATE	<ul style="list-style-type: none"><li>✓ A date. Format: YYYY-MM-DD.</li><li>✓ The supported range is from '1000-01-01' to '9999-12-31'</li></ul>
✓ DATETIME	<ul style="list-style-type: none"><li>✓ A date and time combination. Format: YYYY-MM-DD hh:mm:ss.</li><li>✓ The supported range is from '1000-01-01 00:00:00' to '9999-12-31 23:59:59'.</li></ul>