

How I Learned SQL

Theory Stuffs

DATA TYPES

Numeric Data Types

Data Type	Description	Range (Approx.)
TINYINT	Very small integer	0 to 255 (unsigned), -128 to 127 (signed)
SMALLINT	Small integer	0 to 65,535 (unsigned), -32,768 to 32,767
MEDIUMINT	Medium integer (MySQL)	-8M to 8M approx.
INT / INTEGER	Standard integer	-2,147,483,648 to 2,147,483,647
BIGINT	Large integer	±9.22 quintillion
DECIMAL(p,s)	Exact value, fixed-point	User-defined precision and scale
FLOAT	Approximate, floating-point	~±1.5e-45 to ±3.4e+38 (varies by DB)
DOUBLE	Double-precision float	~±5.0e-324 to ±1.7e+308



Character/String Data Types

Data Type	Description	Max Length
CHAR(n)	Fixed-length string	Up to 255 characters
VARCHAR(n)	Variable-length string	Up to 65,535 bytes (MySQL)
TEXT	Large text field	Up to 2 GB (varies)



Date/Time Data Types

Data Type	Description	Range (MySQL)
DATE	Stores date	'1000-01-01' to '9999-12-31'
DATETIME	Date and time	'1000-01-01 00:00:00' to '9999-12-31 23:59:59'
TIMESTAMP	Auto-updated datetime	'1970-01-01' to '2038-01-19'

Data Type	Description	Range (MySQL)
TIME	Time only	'-838:59:59' to '838:59:59'

Boolean Data Type

Data Type	Description
BOOLEAN	TRUE (1) or FALSE (0)