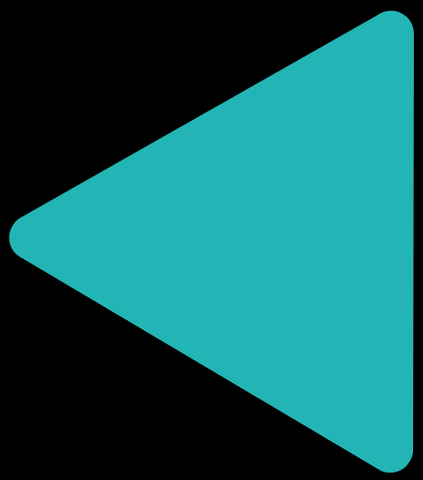


Day 9

Data Types

Numeric

Numeric data types are how numbers are represented in SQL. There are quite a lot, but some of the most common are:

Datatype	From	To
Bit	0	1
Tinyint	0	255
Samllint	-32,768	32,767
Int	-2,147,483,648	2,147,483,647
Bigint	-9,223,372,036,854,775,808	9,223,372,036,854,775,807
Decimal	-10^38 + 1	10^38 – 1
Numeric	-10^38 + 1	10^38 – 1
Float	-1.79E + 308	1.79E + 308
Real	-3.40E + 38	3.4E + 38

Date/Time

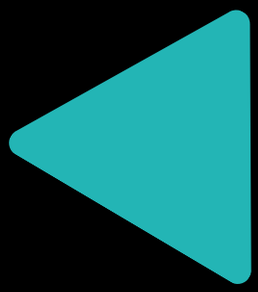
Date and time data types are how dates and times are represented in SQL. There are quite a lot, but some of the most common are:

Datatype	Description
Date	Stores date in the format YYYY-MM-DD
Time	Stores time in the format HH:MM:SS
Datetime	Stores date and time in the format YYYY-MM-DD HH:MM:SS
Timestamp	Stores number of seconds passed since the Unix epoch (1970-01-01 00:00:00 UTC)
Year	Stores year in 2 digits or 4 digits
Month	Stores month in 2 digits
Day	Stores day in 2 digits

Character

Character and unicode character data types are two way characters are represented in SQL. Some of the most common are:

Datatype	Description
Char	Fixed length with a max length of 8000 characters
Varchar	Variable-length with max length of 8000 characters
Varchar (max)	Variable-length with max storage
Text	Variable-length with max size of 2GB
Nchar	Fixed length with max length of 4000 characters
Nvarchar	Variable-length with max length of 4000 character
Nvarchar (max)	Variable-length with max storage
Ntext	Variable length with max size of 1GB



Cast

Cast is used to change a data type into another. For instance, if you want to change 100 to '100' all you would do is type:

CAST(expression **AS** data type)

Another way to do this quicker is the cast operator, **::**

SELECT 100**::**char