SQL supports a variety of data types that can be used to define the columns in a table. These data types can be broadly categorized into several groups: numeric, string, date/time, and others. Here’s an overview of common SQL data types:

### Numeric Data Types

1. \*\*INT\*\*: Integer type with a size of 4 bytes.

2. \*\*SMALLINT\*\*: Integer type with a size of 2 bytes.

3. \*\*BIGINT\*\*: Integer type with a size of 8 bytes.

4. \*\*FLOAT\*\*: Floating-point number.

5. \*\*REAL\*\*: Floating-point number with a precision of 7 digits.

6. \*\*DOUBLE\*\*: Floating-point number with double precision (15 digits).

7. \*\*DECIMAL(p, s)\*\* or \*\*NUMERIC(p, s)\*\*: Exact numeric type with precision `p` and scale `s`.

### String Data Types

1. \*\*CHAR(n)\*\*: Fixed-length character type with a size of `n` bytes.

2. \*\*VARCHAR(n)\*\*: Variable-length character type with a maximum size of `n` bytes.

3. \*\*TEXT\*\*: Variable-length character type with a large capacity.

### Date/Time Data Types

1. \*\*DATE\*\*: Stores dates (year, month, day).

2. \*\*TIME\*\*: Stores time of day (hours, minutes, seconds).

3. \*\*DATETIME\*\*: Stores both date and time.

4. \*\*TIMESTAMP\*\*: Stores both date and time, often with a timezone.

5. \*\*YEAR\*\*: Stores a year value.

### Other Data Types

1. \*\*BOOLEAN\*\*: Stores TRUE or FALSE values.

2. \*\*BLOB\*\*: Binary Large Object, used for storing binary data.

3. \*\*ENUM\*\*: String object with a value chosen from a list of permitted values.

4. \*\*SET\*\*: Similar to ENUM, but can hold multiple values from the list.

### Examples by SQL Dialect

#### MySQL

- \*\*INT\*\*: Integer values.

- \*\*VARCHAR(n)\*\*: Variable-length string with a maximum length of `n`.

- \*\*DATE\*\*: Date values (YYYY-MM-DD).

- \*\*DECIMAL(p, s)\*\*: Exact numeric with precision and scale.

- \*\*ENUM('value1', 'value2', ...)\*\*: Enumerated type.

#### PostgreSQL

- \*\*INTEGER\*\*: Integer values.

- \*\*VARCHAR(n)\*\*: Variable-length string.

- \*\*DATE\*\*: Date values.

- \*\*NUMERIC(p, s)\*\*: Exact numeric.

- \*\*TEXT\*\*: Variable-length string.

- \*\*BOOLEAN\*\*: Boolean values.

#### SQL Server

- \*\*INT\*\*: Integer values.

- \*\*VARCHAR(n)\*\*: Variable-length string.

- \*\*DATE\*\*: Date values.

- \*\*DECIMAL(p, s)\*\*: Exact numeric.

- \*\*DATETIME\*\*: Date and time values.

- \*\*BIT\*\*: Boolean values (0 or 1).

### Examples

```sql

CREATE TABLE ExampleTable (

ID INT PRIMARY KEY,

Name VARCHAR(100),

BirthDate DATE,

Salary DECIMAL(10, 2),

IsActive BOOLEAN

);

```

In this example:

- `ID` is an integer and serves as the primary key.

- `Name` is a variable-length string with a maximum length of 100 characters.

- `BirthDate` is a date.

- `Salary` is a decimal number with up to 10 digits, including 2 decimal places.

- `IsActive` is a boolean value.

Feel free to ask if you need more details on any specific data type or SQL dialect!