

# Approximate numeric data types

Data Type	Lower limit	Upper limit	Memory	Precision
float(n)	-1.79E+308	1.79E+308	Depends on the value of n	7 Digit
real	-3.40E+38	3.40E+38	4 bytes	15 Digit

- The approximate numeric data type stores floating point numeric data. They are often used in scientific calculations.

# Character strings data types

Data Type	Lower limit	Upper limit	Memory
<a href="#">char</a>	0 chars	8000 chars	n bytes
<a href="#">varchar</a>	0 chars	8000 chars	n bytes + 2 bytes
varchar (max)	0 chars	2 <sup>31</sup> chars	n bytes + 2 bytes
text	0 chars	2,147,483,647 chars	n bytes + 4 bytes

- Character strings data types allow you to store either fixed-length (char) or variable-length data (varchar). The text data type can store non-Unicode data in the code page of the server.

# Select - Syntax

```
SELECT
    select_list
FROM
    schema_name.table_name;
```

SQL Server SELECT – sort the result set

```
SELECT
    *
FROM
    sales.customers
WHERE
    state = 'CA';
```

SQL Server SELECT – retrieve some columns of a table example

```
SELECT
    first_name,
    last_name
FROM
    sales.customers;
```

SQL Server SELECT – group rows into groups example

```
SELECT city, COUNT (*)
FROM sales.customers
WHERE state = 'CA'
GROUP BY city
ORDER BY city;
```