Introduction

The `Number` class is derived from the `Token` class. A `Number` object represents a single floating-point number.

Data Members

- `double m_value` – The number.

Public Member Functions

Constructors

- `Number();`

  Constructs a `Number` object with the value `0.0`.

- `Number(double val);`

  Constructs a `Number` object with the value `val`.

Inspectors

- `double value() const;`

  Returns the value of the number.

- `Precedence prec() const;`

  Returns the precedence level.

Mutators

- `void value(double val);`

  Sets the value of the number.

Facilitators

- `void input(istream& in);`

  Reads the value of the number from the `istream`.

- `void output(ostream& out) const;`

  Writes the value of the number to the `ostream`.

Non-member Functions

- `istream& operator>>(istream& in, Number& num);`

  Reads the number from the `istream`.

- `ostream& operator<<(ostream& out, const Number& num);`

  Writes the number to the `ostream`.