

Introduction

The `Token` class is an abstract class that serves as a base class for the `Number`, `Operator`, `LParen`, and `RParen` classes. These classes will use the enumerated types `Precedence` and `Expecting`, defined as follows:

```
enum Precedence {PR_NUMBER, PR_PAREN, PR_ADD, PR_MULT};  
enum Expecting {EX_NUM_OR_LPAREN, EX_OPER_OR_RPAREN};
```

Data Members

- `static Expecting m_expecting;`

Public Member Functions

Constructors

- Only the automatic default and copy constructors.

Inspectors

- `Precedence prec() const;`
Returns the precedence level of the token. This is a pure virtual function.
- `static Expecting expecting();`
Returns the data member `m_expecting`.

Facilitators

- `void input(istream& in);`
Reads the token from the `istream`. This is a pure virtual function.
- `void output(ostream& out) const;`
Writes the token to the `ostream`. This is a pure virtual function.

Non-member Functions

- `istream& operator>>(istream& in, Token& t);`
Reads the token from the `istream`.
- `ostream& operator<<(ostream& out, const Token& t);`
Writes the token to the `ostream`.