

Lexical description of the Mini-C++ programming language

Reserved words:

bool	else	int	true
class	false	public	void
do	if	return	while
static	cin	cout	endl

Punctuation and operators:

({	;	*		==	<=
)	}	,	/	!	!=	>=
[.	+	%	?	<	<<
]	:	–	&&	=	>	>>

Other tokens:

A number denotes a non-negative base-10 integer literal. It contains only digits.

An identifier contains only letters, digits, and underscores. However, it cannot begin with a digit.

A string begins and ends with double quotes ". Inside the string, any individual characters may appear except for \, ", and control characters. Additionally, these escape sequences may appear: \\, \", \n, and \t.

A special EndOfFile token is returned when the source program input stream is exhausted.

Miscellaneous lexical rules:

Reserved words and identifiers are case sensitive. That is, **if** denotes a reserved word, but **If** and **iF** and **IF** all denote distinct identifiers.

Whitespace includes invisible characters (blanks, tabs, new lines) and comments. Comments have two forms. A comment can begin with // and extend to the end of the current line. A comment can also begin with /* and end with */.