# Notation

## Grammar

The following notational convention is used in grammar snippets:

| Notation | Example | Meaning |
|---|---|---|
| `CAPITAL_CASE` | `IDENTIFIER` | A named nonterminal or lexer token |
| `"string"` | `"if"`, `"+"` | The exact character(s) |
| `` `string` `` | `` `"` `` | Alternative syntax for exact character(s) |
| `snake_case` | `let_stmt`, `item` | A syntactical production |
| `\x` | `\n`, `\r`, `\t`, `\0` | The character represented by this escape |
| `x?` | `pub?` | An optional item |
| `x*` | `item*` | 0 or more of `x` |
| `x+` | `item+` | 1 or more of `x` |
| `x{a}` | `[0-9a-fA-F]{2}` | Exactly `a` repetitions of `x` |
| `x{a,b}` | `[0-9a-fA-F]{1,6}` | `a` to `b` repetitions of `x` |
| `\|` | `felt \| int` | Either one or another |
| `[ ]` | `[bB]` | Any of the characters listed |
| `[ - ]` | `[a-z]` | Any of the characters in the range |
| `~[ ]` | `~[bB]` | Any characters, except those listed |
| `~"string"` | `~"\n"`, `~"*/"` | Any characters, except this sequence |
| `~CAPITAL_CASE` | `~EOL*` | Any characters, except sequences matching the lexer token |
| `( )` | `( "," parameter )?` | Group items |
| `/* text */` | `ITEM /* except IMPL_ITEM */` | Human words supplementation |