

```

PROGRAM ::= COMMAND PROGRAM | COMMAND.
COMMAND ::= CLAUSE `.` | QUERY `.` | OPDECL `.`.
CLAUSE ::= FACT | RULE.
QUERY ::= `?-` QUERYBODY.
OPDECL ::= `:-op` `(` ` PRIORITY `,` ASOCIATIVITY `,`
OPNAME `)` `.`.
FACT ::= HEAD.
RULE ::= HEAD `:-` RULEBODY.
HEAD ::= ATOM | STRUCTURE.
QUERYBODY ::= ALTERNATIVES.
ALTERNATIVEBODY ::= ALTERNATIVES.
ALTERNATIVES ::= HEAD `;` ALTERNATIVES | ALTERNATIVE.
PRIORITY ::= INTEGER.
ASOCIATIVITY ::= PRFASOC | POFASOC | INFASOC | LEFASOC |
RIFASOC.
PRFASOC ::= `fx` | `fy`.
POFASOC ::= `xf` | `yf`.
INFASOC ::= `xfx` | `yfy`.
LEFASOC ::= `yfx`.
RIFASOC ::= `xfy`.
OPNAME ::= ATOM.
ATOM ::= LWRCHAR | LWRCHAR NONSPECIALCHARS | SPECIALCHARS
| `` CHARS ``.
STRUCTURE ::= FUNCTOR `(` ARGUMENTS `)` | STRUCTWITHOP |
LIST.
STRUCTWITHOP ::= PRFOP TERM | TERM POFOP | TERM INFOP
TERM.
FUNCTOR ::= ATOM | `.`.
ARGUMENTS ::= ARGUMENT `,` ARGUMENTS | ARGUMENT.
ARGUMENT ::= TERM.
CHAR ::= ALPHACHAR | NUMBERCHAR | SPECIALCHAR | `_`.
CHARS ::= CHAR CHARS | CHAR.
NONSPECIALCHAR ::= ALPHACHAR | NUMBERCHAR | `_`.
NONSPECIALCHARS ::= NONSPECIALCHAR NONSPECIALCHARS |
NONSPECIALCHAR.
ALPHACHAR ::= LWRCHAR | UPRCHAR.

```

NUMBERCHAR ::= `0`|`1`|`2`|`3`|`4`|`5`|`6`|`7`|`8`|`9`.

LWRCHAR ::=

`a`|`b`|`c`|`d`|`e`|`f`|`g`|`h`|`i`|`j`|`k`|`l`|`m`|`n`|`o`

UPRCHAR ::=

`A`|`B`|`C`|`D`|`E`|`F`|`G`|`H`|`I`|`J`|`K`|`L`|`M`|`N`|`O`

SPECIALCHAR ::= `@`|`#`|`\$`|`&`|`='|`-`|`+`|`*`|`/`.

SPECIALCHARS ::= SPECIALCHAR SPECIALCHARS | SPECIALCHAR.

PRFOP ::= `?-`|`not`|`:-`|ATOM.

POFOP ::= ATOM.

INFOP ::= `:-`|ARIOP|`;`|`,`|RELOP|`is`|`=..`|`.`.

ARIOP ::= `+`|`-`|`*`|`/`|`mod`|`^`.

RELOP ::= `=`|`\=`|`<`|`=

<`|`>`|`>=`|`:=`|`=\\=`|`==`|`\==`.

LIST ::= `[]`|EASYLEST|DIVIDEDLIST|TERM`.`LIST.

EASYLEST ::= `[`TERMS`]`.

DIVIDEDLIST ::= `[`TERMS`|`TERMS`]`.

TERMS ::= TERM`,`TERMS|TERM.

TERM ::= ATOM|INTEGER|IDENTIFIER|STRUCTURE|LIST.

INTEGER ::= DIGIT INTEGER|DIGIT.

DIGIT ::= NUMBERCHAR.

IDENTIFIER ::= ATOM.