

Sky AutoTrack Grammar

Austin Dill

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Tokens

BEGIN \leftarrow "begin"

FOR \leftarrow "for"

DOTS \leftarrow "..."

LOOP \leftarrow "loop"

COLON \leftarrow ":"

SEMI \leftarrow ";"

COMMA *leftarrow* ","

FOR-END \leftarrow "end"

PARK \leftarrow "park"

SLEW \leftarrow "slew"

TO \leftarrow "to"

LPAREN \leftarrow "("

RPAREN \leftarrow ")"

RECORD \leftarrow "record"

STOP \leftarrow "stop"

DONE \leftarrow "done"

INT

FLOAT

Grammar Rules

$\langle program \rangle \leftarrow \mathbf{BEGIN} \langle statement - series \rangle \mathbf{DONE}$

$\langle \textit{for-loop} \rangle \leftarrow \textbf{FOR INT DOTS INT LOOP COLON } \langle \textit{statement} - \textit{series} \rangle \textbf{ END SEMI}$
 $\langle \textit{park} \rangle \leftarrow \textbf{PARK SEMI}$
 $\langle \textit{slew} \rangle \leftarrow \textbf{SLEW TO LPAREN FLOAT COMMA FLOAT RPAREN SEMI}$
 $\langle \textit{record} \rangle \leftarrow \textbf{RECORD SEMI } \langle \textit{statement} - \textit{series} \rangle \textbf{ STOP SEMI}$
 $\langle \textit{statement} - \textit{series} \rangle \leftarrow \langle \textit{statement} \rangle \langle \textit{statement} - \textit{series} \rangle$
 $\langle \textit{statement} - \textit{series} \rangle \leftarrow \epsilon$
 $\langle \textit{statement} \rangle \leftarrow \langle \textit{for-loop} \rangle$
 $\langle \textit{statement} \rangle \leftarrow \langle \textit{park} \rangle$
 $\langle \textit{statement} \rangle \leftarrow \langle \textit{slew} \rangle$
 $\langle \textit{statement} \rangle \leftarrow \langle \textit{record} \rangle$