

L Grammar

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$$\begin{aligned} [\text{Prog}] &\rightarrow [\text{Func}]^+ \\ [\text{Func}] &\rightarrow \textit{ident}(\textit{ident}^*) \{[\text{Stmt}]^*\} \\ [\text{Stmt}] &\rightarrow \begin{cases} \text{return} & [\text{Expr}]; \\ \text{let } \textit{ident} & [\text{OptAssign}]; \\ \textit{ident} & [\text{OptAssign}]; \end{cases} \\ [\text{OptAssign}] &\rightarrow \begin{cases} = [\text{Expr}] \\ [\] \end{cases} \\ [\text{Expr}] &\rightarrow \begin{cases} [\text{Term}] \\ [\text{BinExpr}] \end{cases} \\ [\text{Term}] &\rightarrow \begin{cases} \textit{IntLit} \\ \textit{ident} \\ ([\text{Expr}]) \\ \textit{ident}([\text{Expr}]^*) \end{cases} \\ [\text{BinExpr}] &\rightarrow \begin{cases} [\text{Expr}] + [\text{Expr}] \\ [\text{Expr}] - [\text{Expr}] \\ [\text{Expr}] * [\text{Expr}] \\ [\text{Expr}] / [\text{Expr}] \end{cases} \end{aligned}$$