1. **Parsing Rules:**

* P ------> ( S )P|ε
* S ------> Assignment
* S ------🡪 Expression
* S ------> Whenstatement
* S ------> read nullableId
* nullableId -------> id| epsilon
* S ------> Writestatement
* S ------> Dotimestatement
* S ------>Function
* S ------>Defvarstatement
* Assignment ------> setq identifier Assigmentvalue
* Assigmentvalue ------> NoExpParam | ( ASS
* ASS ------> Expression ) | read )
* Expression ------> Arithmeticoperator Element Elements
* Expression ------> Relationaloperator Element Element
* Expression ------> Incoperator Element Incvalue
* Expression ------> Reminderoperator Element Element
* Elements ------> Element Elements | ε
* Element ------> identifier | constant |(Exp)
* Arithmeticoperator ------> + | \* | - | /
* Relationaloperator ------> = | > | < | <= | >=
* Incvalue ------> Element | ε
* Incoperator ------> incf | decf
* Reminderoperator ------> rem | mod
* Whenstatement------>when ( Expression ) ( S ) S’
* S’ ------> ( S ) S’ | ε
* Writestatement ------> write Param
* Dotimestatement ------> dotimes ( identifier constant ) ( S ) S’
* Function ------> identifier Parameters
* Parameters ------> Param Parameters | ε
* Defvarstatement ------> defvar id Defvalue
* Defvalue ------> NoExpParam | (DefValueOption | ε
* Param ------> identifier | constant | string | (Exp)
* NoExpParam ------> identifier | constant | string
* DefValueOption ------> Read) | Exp)