

$V_T = \{A..Z, a..z, 0..9, _, int, bool, True, False, var, def, (,), \{, \}, =, *, /, +, -, ,, return\}$

$start \rightarrow \langle set_of_affirmations \rangle$

$\langle set_of_affirmations \rangle \rightarrow \langle affirmation \rangle$

$| \langle set_of_affirmations \rangle \langle affirmation \rangle$

$\langle affirmation \rangle \rightarrow \langle assignment \rangle$

$| \langle function_declaration \rangle$

$| \langle func_call \rangle$

$| \epsilon$

$| \langle operations \rangle$

$\langle operations \rangle \rightarrow \langle NUMBER \rangle \langle operator \rangle \langle NUMBER \rangle (\langle operator \rangle \langle NUMBER \rangle)^*$

$\langle operator \rangle \rightarrow + | - | * | /$

$\langle assignment \rangle \rightarrow var \langle cname \rangle = (\langle var_assign \rangle | \langle func_call \rangle)$

$\langle var_assign \rangle \rightarrow \langle BOOL \rangle | \langle NUMBER \rangle$

$\langle BOOL \rangle \rightarrow True | False$

$\langle NUMBER \rangle \rightarrow \langle INT \rangle$

$| \langle NUMBER/0 \rangle \langle NUMBER \rangle$

$\langle INT \rangle \rightarrow [0 - 9]$

$\langle func_call \rangle \rightarrow \langle cname \rangle (\langle input \rangle)$

$\langle function_declaration \rangle \rightarrow def int | bool | \epsilon \langle cname \rangle (\langle input \rangle) \{ \langle set_of_affirmations \rangle return \langle return_type \rangle \}$

$\langle return_type \rangle \rightarrow \langle NUMBER \rangle | \langle BOOL \rangle | \epsilon$

$\langle cname \rangle \rightarrow ("_" | LETTER) ("_" | LETTER | INT)^*$

$\langle LETTER \rangle \rightarrow ([A..Z] | [a..z])^+$

$\langle input \rangle \rightarrow (\langle Number \rangle + \langle Bool \rangle)^*,$