

$$\text{Prog} ::= \text{Declaração} | \text{Prog} |$$

$$\text{Att} | \text{Prog} |$$

$$\text{Cond} | \text{Prog} |$$

$$\text{Repetição} | \text{Prog} | \epsilon$$

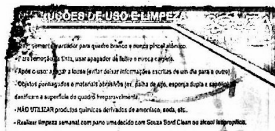
$$\langle \text{Att} \rangle ::= \text{Id} = \langle \text{expr} \rangle ; | \epsilon$$

$$\langle \text{Declaração} \rangle ::= \langle \text{tipo} \rangle \text{Id} ; | \langle \text{tipo} \rangle \langle \text{Att} \rangle ;$$

$$\langle \text{tipo} \rangle ::= \text{Int} | \text{float} | \text{char} ;$$

$$\langle \text{Repetição} \rangle ::= \text{while}(\langle \text{exp} \rangle) \{ \langle \text{bloco} \rangle \}$$

$$\langle \text{exp} \rangle ::= (\langle \text{expressão} \rangle) ;$$

$$\langle \text{bloco} \rangle ::= \text{Prog} ;$$


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$$\langle \text{Att} \rangle ::= \text{Id} = \langle \text{exp} \rangle ; | \epsilon$$

$$\langle \text{Declaração} \rangle ::= \langle \text{tipo} \rangle \text{ Id} ; | \langle \text{tipo} \rangle \langle \text{Att} \rangle ;$$

$$\langle \text{tipo} \rangle ::= \text{Int} | \text{float} | \text{char} ;$$

$$\langle \text{Repetição} \rangle ::= \text{while}(\langle \text{exp} \rangle) \{ \langle \text{bloco} \rangle \}$$

$$\langle \text{exp} \rangle ::= (\langle \text{expressão} \rangle) ;$$

$$\langle \text{bloco} \rangle ::= \text{Prog} ;$$


Prog \rightarrow First(tipo, id, if, while)

Att \rightarrow First(id, ;)

Decl \rightarrow int, float, char;

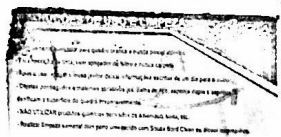
tipo \rightarrow int, float, char;

Rep \rightarrow while

bloco \rightarrow tipo, id, if, while

First

Follow??



Prog(L) <

Simb = get-next()

if (Simb == tipo) { Decl(); }

else if (Simb == Id) { Att(); }

else if (Simb == while) { repeticao(); }

else if (Simb == if) { cond(); }

else { erro(); }

}

Att () {

Simb = next-simb();

if (Simb == Id) {

Simb = next-simb();

if (Simb == "=") {

Simb = next-simb();

exp();

}

}

}

Decl() {

Simb = next-simb();

if (Simb == Int || Simb == float || Simb == chr)

Simb = next-simb();

if (Simb == Id) {

Simb = next-simb();

if (Simb != ";" || ")") {

error();

}
}
}
}

tipo() {

 simb = next-simb();

 if (simb == int || simb == float || simb == chr.)

 return 0;

 } else {

 error;

 return -1;

}

Repl<

Simb = next-simb(1;

if (Simb == "while") {

Simb = next-simb(1;

expressao(1;

Simb = next-simb(1;

if (Simb == "{") {

bloco(1;

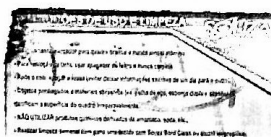
Simb = next-simb(1;

if (Simb != "}") {

erros(1;

} }

}



$\langle \text{bloco} \rangle ::= \langle \text{programa} \rangle$

$\text{bloco}()$ {

$\text{simb} = \text{next-simb}();$

 if ($\text{simb} == \{$) {

$\text{programa}();$

$\text{simb} = \text{next-simb}();$

 if ($\text{simb} != \}$) { erro();

 }

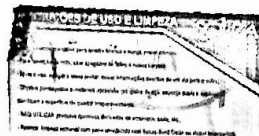
}

$\langle \text{exp} \rangle ::= (\text{exp})$

Seguir o

modelo

Aritmético.



- Prog();
- Att();
- Declared();
- Repetition();
- Condition();

Condition ::= if(exp) bloco /
if(exp) bloco else
bloco.

```
Cond() {
    Simb = next-simb();
    if (Simb == "if") {
        exp();
        bloco();
    }
    Simb = next-simb();
    if (Simb == "else") { bloco(); }
}
```