

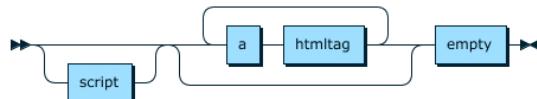
program:



program ::= 'PROGRAM' 'ID' program1

no references

program1:



program1 ::= script? ( a hmtltag )\* empty

referenced by:

- program

script:

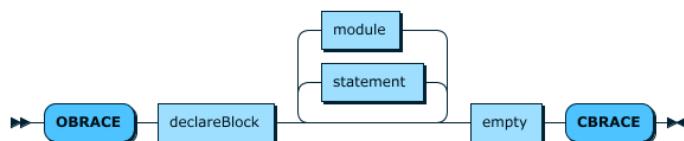


script ::= 'SCRIPT' snp\_script\_start block

referenced by:

- program1

block:

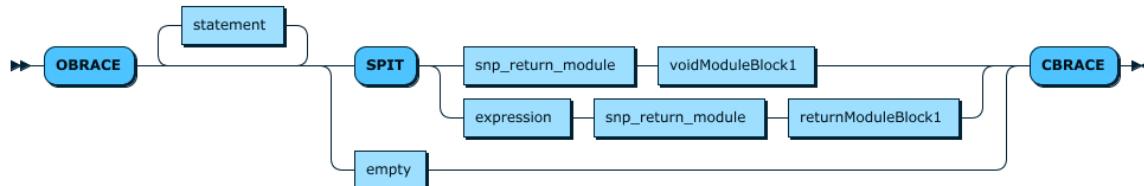


block ::= 'OBRACE' declareBlock ( statement | module )\* empty 'CBRACE'

referenced by:

- script

simpleBlock:

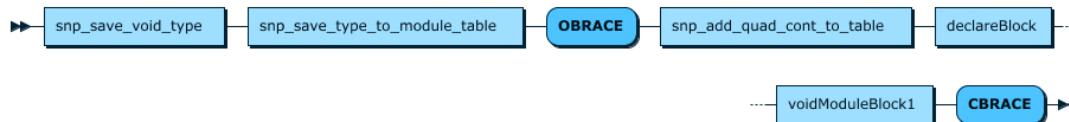


simpleBlock ::= 'OBRACE' statement\* ( 'SPIT' ( snp\_return\_module voidModuleBlock1 | expression snp\_return\_module returnModuleBlock1 ) | empty ) 'CBRACE'

referenced by:

- condition
- condition1
- cycle
- doCycle

voidModuleBlock:

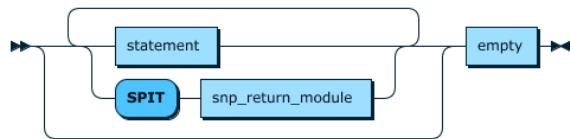


voidModuleBlock ::= snp\_save\_void\_type snp\_save\_type\_to\_module\_table 'OBRACE' snp\_add\_quad\_cont\_to\_table declareBlock voidModuleBlock1 'CBRACE'

referenced by:

- module1

voidModuleBlock1:

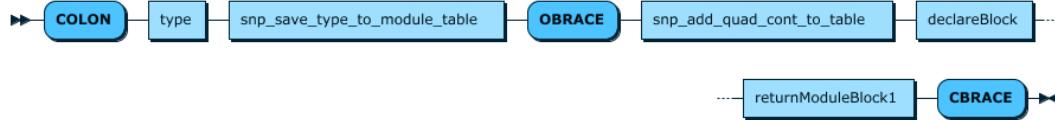


[voidModuleBlock1](#)  
 $::= (\text{statement} \mid \text{SPIT} \text{ } \text{snp\_return\_module})^* \text{empty}$

referenced by:

- [simpleBlock](#)
- [voidModuleBlock](#)

returnModuleBlock:

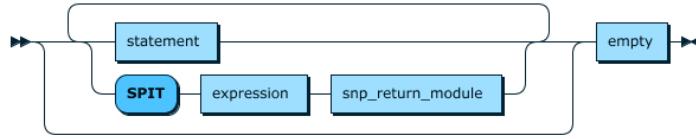


[returnModuleBlock](#)  
 $::= \text{COLON} \text{ } \text{type} \text{ } \text{snp\_save\_type\_to\_module\_table} \text{ } \text{OBRACE} \text{ } \text{snp\_add\_quad\_cont\_to\_table} \text{ } \text{declareBlock} \text{ } \text{returnModuleBlock1} \text{ } \text{CBRACE}$

referenced by:

- [module1](#)

returnModuleBlock1:



[returnModuleBlock1](#)  
 $::= (\text{statement} \mid \text{SPIT} \text{ } \text{expression} \text{ } \text{snp\_return\_module})^* \text{empty}$

referenced by:

- [returnModuleBlock](#)
- [simpleBlock](#)

declareBlock:

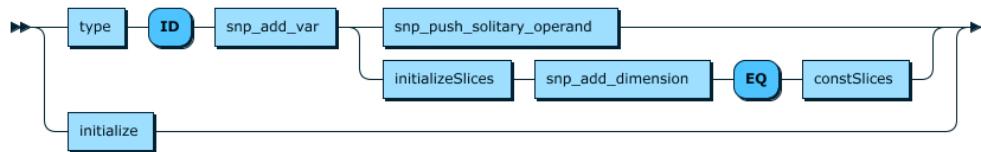


[declareBlock](#)  
 $::= \text{declare}^* \text{empty}$

referenced by:

- [block](#)
- [returnModuleBlock](#)
- [voidModuleBlock](#)

declare:



[declare](#)  
 $::= \text{type} \text{ } \text{ID} \text{ } \text{snp\_add\_var} \text{ } (\text{snp\_push\_solitary\_operand} \mid \text{initializeSlices} \text{ } \text{snp\_add\_dimension} \text{ } \text{EQ} \text{ } \text{constSlices})$   
 $\mid \text{initialize}$

referenced by:

- [declareBlock](#)

initialize:



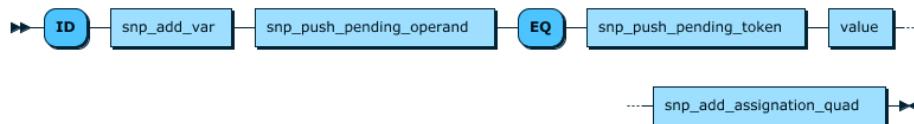
[initialize](#)

```
 ::= type initialize1 ( 'COMMA' initialize1 )* empty
```

referenced by:

- [declare](#)

initialize1:



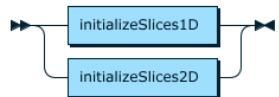
```
initialize1
```

```
 ::= 'ID' snp_add_var snp_push_pending_operand 'EQ' snp_push_pending_token value snp_add_assignment_quad
```

referenced by:

- [initialize](#)

initializeSlices:



```
initializeSlices
```

```
 ::= initializeSlices1D  
 | initializeSlices2D
```

referenced by:

- [declare](#)

initializeSlices1D:



```
initializeSlices1D
```

```
 ::= 'OBRACK' 'CTEI' 'CBRACK' snp_increase_dimension_count
```

referenced by:

- [initializeSlices](#)

constSlices:



```
constSlices
```

```
 ::= constSlice1D
```

referenced by:

- [declare](#)

constSlice1D:



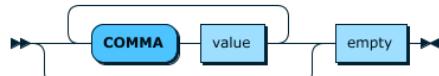
```
constSlice1D
```

```
 ::= 'OBRACK' 'CBRACK' snp_init_slice_1d
```

referenced by:

- [constSlices](#)

constSlice1D1:



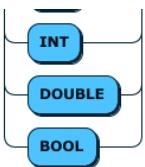
```
constSlice1D1
```

```
 ::= ( 'COMMA' value )* empty
```

no references

type:



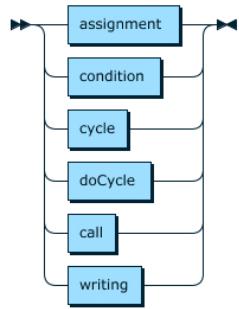


`type` ::= ('STR' | 'INT' | 'DOUBLE' | 'BOOL') [snp\\_save\\_type](#)

referenced by:

- [arguments](#)
- [declare](#)
- [initialize](#)
- [returnModuleBlock](#)

statement:

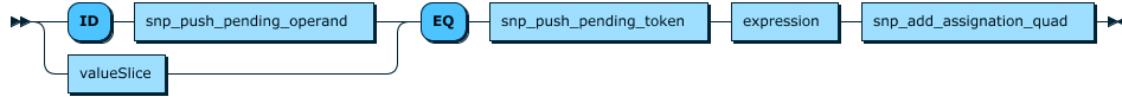


`statement` ::= [assignment](#)  
           | [condition](#)  
           | [cycle](#)  
           | [doCycle](#)  
           | [call](#)  
           | [writing](#)

referenced by:

- [block](#)
- [returnModuleBlock1](#)
- [simpleBlock](#)
- [voidModuleBlock1](#)

assignment:



`assignment` ::= ('ID' [snp\\_push\\_pending\\_operand](#) | [valueSlice](#)) 'EQ' [snp\\_push\\_pending\\_token](#) [expression](#) [snp\\_add\\_assignment\\_quad](#)

referenced by:

- [statement](#)

expression:

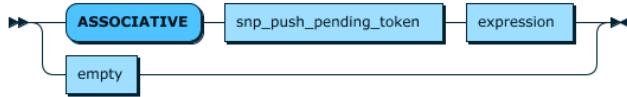


`expression` ::= [rel\\_expression](#) [expression1](#) [snp\\_check\\_precedence\\_and\\_create\\_quadruple\\_for\\_logic](#)

referenced by:

- [assignment](#)
- [condition](#)
- [cycle](#)
- [doCycle](#)
- [expression1](#)
- [factor](#)
- [html\\_assignment](#)
- [html\\_condition](#)
- [html\\_cycle](#)
- [html\\_end\\_do\\_cycle](#)
- [htmlscript](#)
- [params](#)
- [returnModuleBlock1](#)
- [simpleBlock](#)
- [writing1](#)

expression1:

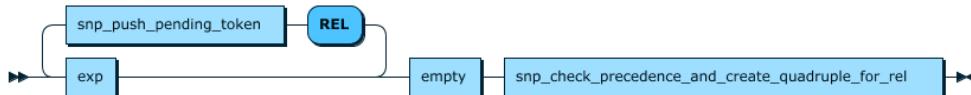


expression  
::= 'ASSOCIATIVE' [snp\\_push\\_pending\\_token](#) [expression](#)  
| [empty](#)

referenced by:

- [expression](#)

rel\_expression:

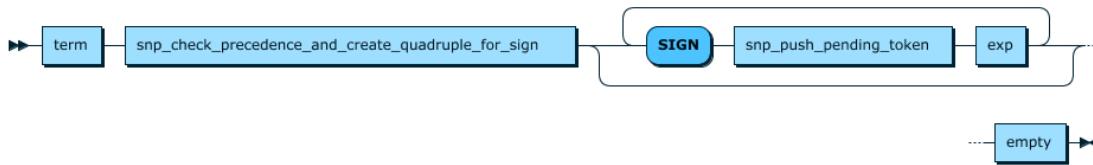


rel\_expression  
::= [exp](#) ( 'REL' [snp\\_push\\_pending\\_token](#) [exp](#) )\* [empty](#) [snp\\_check\\_precedence\\_and\\_create\\_quadruple\\_for\\_rel](#)

referenced by:

- [expression](#)

exp:

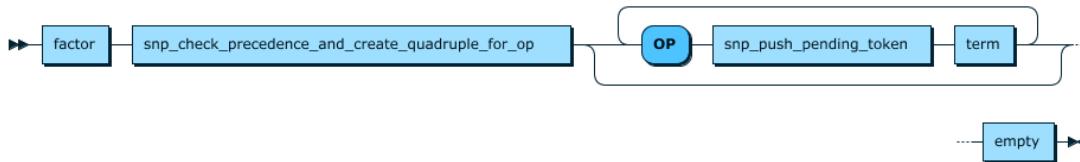


exp ::= [term](#) [snp\\_check\\_precedence\\_and\\_create\\_quadruple\\_for\\_sign](#) ( 'SIGN' [snp\\_push\\_pending\\_token](#) [exp](#) )\* [empty](#)

referenced by:

- [exp](#)
- [rel\\_expression](#)

term:

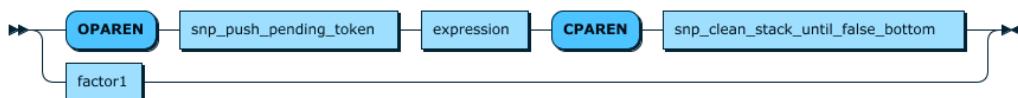


term ::= [factor](#) [snp\\_check\\_precedence\\_and\\_create\\_quadruple\\_for\\_op](#) ( 'OP' [snp\\_push\\_pending\\_token](#) [term](#) )\* [empty](#)

referenced by:

- [exp](#)
- [term](#)

factor:



factor ::= 'OPAREN' [snp\\_push\\_pending\\_token](#) [expression](#) 'CPAREN' [snp\\_clean\\_stack\\_until\\_false\\_bottom](#)  
| [factor1](#)

referenced by:

- [term](#)

factor1:

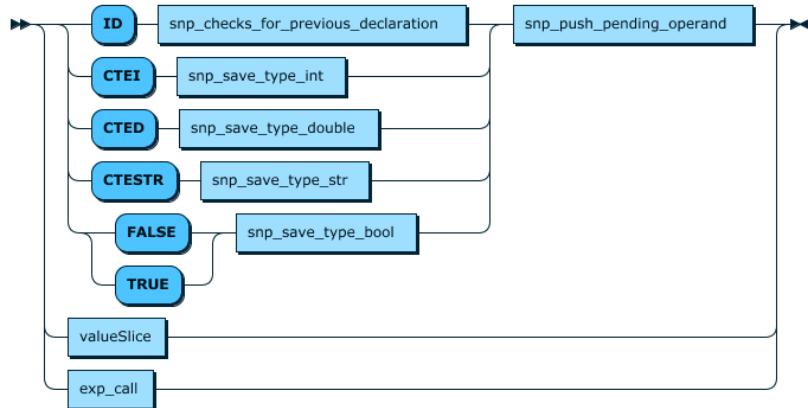


factor1 ::= 'SIGN'? [value](#)

referenced by:

- [factor](#)

value:



```
value ::= ('ID' snp_checks_for_previous_declaration | 'CTEI' snp_save_type_int | 'CTED' snp_save_type_double | 'CTESTR' snp_save_type_str | ('FALSE' | 'TRUE') snp_save_type_bool ) snp_push_pending_operand  
| valueSlice  
| exp_call
```

referenced by:

- [constSlice1D1](#)
- [factor1](#)
- [initialize1](#)

slice\_expression:

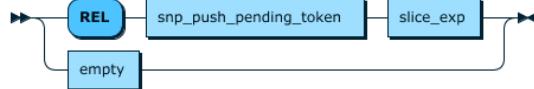


```
slice_expression ::= slice_exp slice_expression1 snp_check_precedence_and_create_quadruple_for_rel
```

referenced by:

- [slice factor](#)
- [valueSlice1D](#)

slice\_expression1:

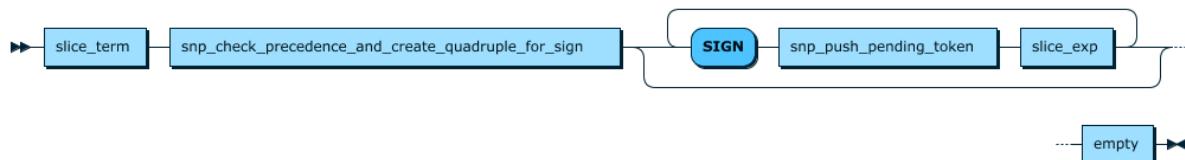


```
slice_expression1 ::= 'REL' snp_push_pending_token slice_exp  
| empty
```

referenced by:

- [slice expression](#)

slice\_exp:

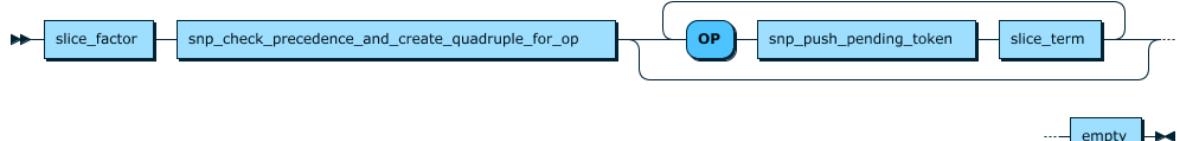


```
slice_exp ::= slice_term snp_check_precedence_and_create_quadruple_for_sign ( 'SIGN' snp_push_pending_token slice_exp )* empty
```

referenced by:

- [slice\\_exp](#)
- [slice expression](#)
- [slice expression1](#)

slice\_term:



```
slice_term
 ::= slice_factor sfp_check_precedence_and_create_quadruple_for_op ( 'OP' sfp_push_pending_token slice_term )* empty
```

referenced by:

- [slice\\_exp](#)
- [slice\\_term](#)

slice\_factor:

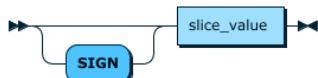


```
slice_factor
 ::= 'OPAREN' sfp_push_pending_token slice_expression 'CPAREN' sfp_clean_stack_until_false_bottom
 | slice_factor1
```

referenced by:

- [slice\\_term](#)

slice\_factor1:

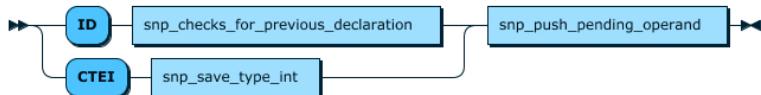


```
slice_factor1
 ::= 'SIGN'? slice_value
```

referenced by:

- [slice\\_factor](#)

slice\_value:



```
slice_value
 ::= ( 'ID' sfp_checks_for_previous_declaration | 'CTEI' sfp_save_type_int ) sfp_push_pending_operand
```

referenced by:

- [slice\\_factor1](#)

valueSlice:

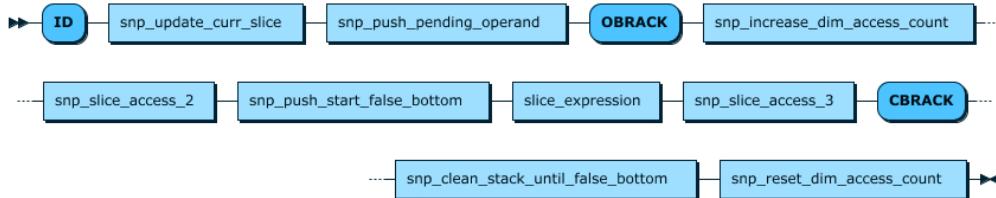


```
valueSlice
 ::= valueSlice1D
```

referenced by:

- [assignment](#)
- [value](#)

valueSlice1D:



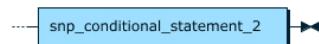
```
valueSlice1D
 ::= 'ID' sfp_update_curr_slice sfp_push_pending_operand 'OBRACK' sfp_increase_dim_access_count snp_slice_access_2 snp_push_start_false_bottom
 slice_expression snp_slice_access_3 'CBRACK' snp_clean_stack_until_false_bottom snp_reset_dim_access_count
```

referenced by:

- [valueSlice](#)

condition:



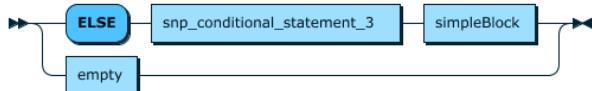


condition ::= 'IF' 'OPAREN' [expression](#) 'CPAREN' [snp\\_conditional\\_statement\\_1](#) [simpleBlock](#) [condition1](#) [snp\\_conditional\\_statement\\_2](#)

referenced by:

- [statement](#)

condition1:

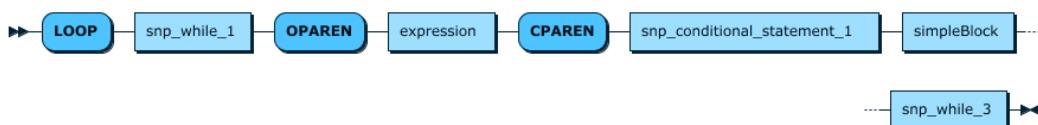


condition1 ::= 'ELSE' [snp\\_conditional\\_statement\\_3](#) [simpleBlock](#)  
| [empty](#)

referenced by:

- [condition](#)

cycle:



cycle ::= 'LOOP' [snp\\_while\\_1](#) 'OPAREN' [expression](#) 'CPAREN' [snp\\_conditional\\_statement\\_1](#) [simpleBlock](#) [snp\\_while\\_3](#)

referenced by:

- [statement](#)

doCycle:

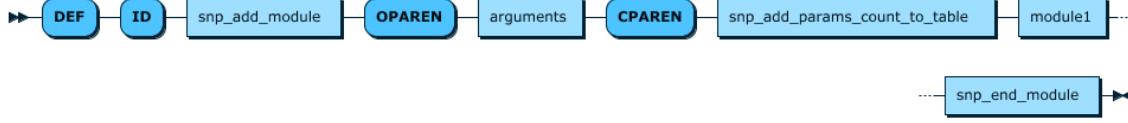


doCycle ::= 'DO' [snp\\_while\\_1](#) [simpleBlock](#) 'LOOP' 'OPAREN' [expression](#) 'CPAREN' [snp\\_do\\_while\\_gotot](#)

referenced by:

- [statement](#)

module:

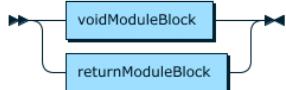


module ::= 'DEF' 'ID' [snp\\_add\\_module](#) 'OPAREN' [arguments](#) 'CPAREN' [snp\\_add\\_params\\_count\\_to\\_table](#) [module1](#) [snp\\_end\\_module](#)

referenced by:

- [block](#)

module1:



module1 ::= voidModuleBlock  
| returnModuleBlock

referenced by:

- [module](#)

call:

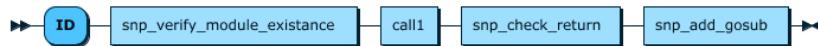


call ::= 'ID' [snp\\_verify\\_module\\_existance](#) [call1](#) [snp\\_add\\_gosub](#)

referenced by:

- [statement](#)

**exp\_call:**



`exp_call ::= 'ID' snp\_verify\_module\_existance call1 snp\_check\_return snp\_add\_gosub`

referenced by:

- [value](#)

**call1:**



`call1 ::= 'OPAREN' snp\_add\_era\_size\_quad params 'CPAREN'`

referenced by:

- [call](#)
- [exp\\_call](#)

**params:**

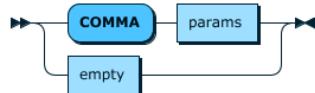


`params ::= expression snp\_check\_param params1  
| empty`

referenced by:

- [call1](#)
- [html\\_call](#)
- [params1](#)

**params1:**



`params1 ::= 'COMMA' params  
| empty`

referenced by:

- [params](#)

**writing:**



`writing ::= 'EVAL' 'OPAREN' writing1 'CPAREN'`

referenced by:

- [html\\_statement](#)
- [statement](#)

**writing1:**

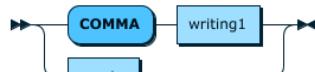


`writing1 ::= snp\_push\_pending\_eval\_token expression snp\_add\_eval\_quad writing2`

referenced by:

- [writing](#)
- [writing2](#)

**writing2:**



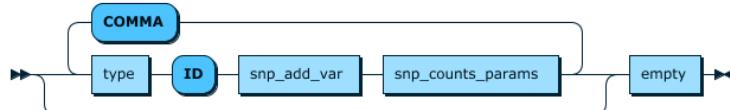


writing2 ::= 'COMMA' writing1  
| empty

referenced by:

- [writing1](#)

arguments:



arguments ::= ( type 'ID' snp\_add\_var snp\_counts\_params ( 'COMMA' type 'ID' snp\_add\_var snp\_counts\_params )\* )? empty

referenced by:

- [module](#)

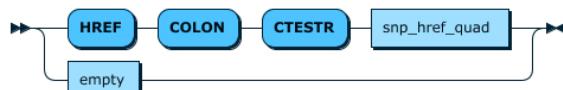
html\_class:



html\_class ::= 'CLASS' 'COLON' 'CTESTR' snp\_class\_quad  
| empty

no references

html\_href:



html\_href ::= 'HREF' 'COLON' 'CTESTR' snp\_href\_quad  
| empty

no references

html\_img:



html\_img ::= 'SRC' 'COLON' 'CTESTR' snp\_img\_quad  
| empty

no references

htmlscript:

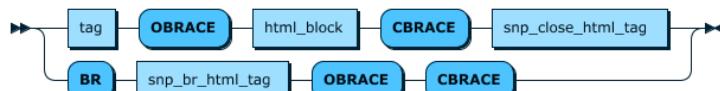


htmlscript ::= 'OEVALSCRIPT' snp\_push\_eval\_pending\_token expression 'CEVALSCRIPT' snp\_add\_eval\_quad

referenced by:

- [html statement](#)

htmltag:



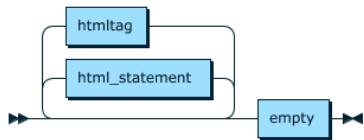
htmltag ::= tag 'OBRACE' html\_block 'CBRACE' snp\_close\_html\_tag  
| 'BR' snp\_br\_html\_tag 'OBRACE' 'CBRACE'

referenced by:

- [html block](#)
- [nroparam1](#)

...  
...

#### html\_block:

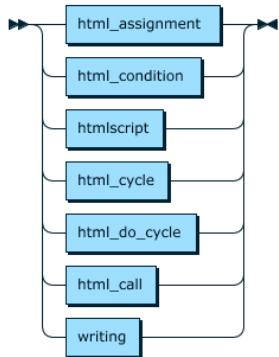


`html_block`  
::= ( `html_statement` | `htmltag` )\* `empty`

#### referenced by:

- [html condition](#)
- [html condition1\\_else](#)
- [html cycle](#)
- [html do\\_cycle](#)
- [htmltag](#)

#### html\_statement:

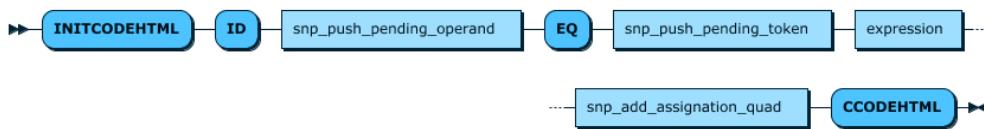


`html_statement`  
::= `html_assignment`  
| `html_condition`  
| `htmlscript`  
| `html_cycle`  
| `html_do_cycle`  
| `html_call`  
| `writing`

#### referenced by:

- [html block](#)

#### html\_assignment:

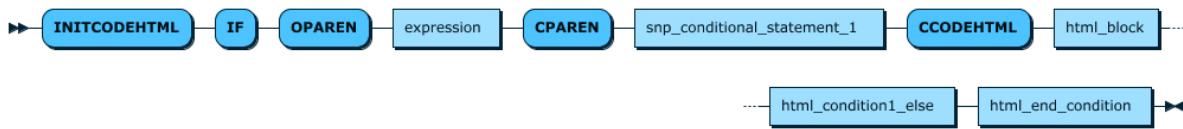


`html_assignment`  
::= 'INITCODEHTML' 'ID' `snp_push_pending_operand` 'EQ' `snp_push_pending_token` `expression` `snp_add_assignment_quad` 'CCODEHTML'

#### referenced by:

- [html statement](#)

#### html\_condition:



`html_condition`  
::= 'INITCODEHTML' 'IF' 'OPAREN' `expression` 'CPAREN' `snp_conditional_statement_1` 'CCODEHTML' `html_block` `html_condition1_else` `html_end_condition`

#### referenced by:

- [html statement](#)

#### html\_condition1\_else:



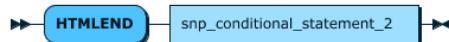


`html_condition_if ::= 'HTMLIF' sfp_if html_block | empty`

referenced by:

- [html condition](#)

html\_end\_if:

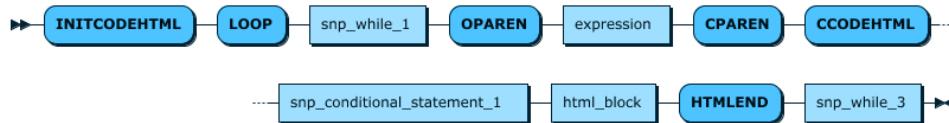


`html_end_if ::= 'HTMLEND' sfp_if`

referenced by:

- [html condition](#)

html\_cycle:



`html_cycle ::= 'INITCODEHTML' 'LOOP' sfp_while_1 'OPAREN' expression 'CPAREN' 'CCODEHTML' sfp_if html_block 'HTMLEND' sfp_while_3`

referenced by:

- [html statement](#)

html\_do\_cycle:



`html_do_cycle ::= 'INITCODEHTML' 'DO' 'CCODEHTML' sfp_while_1 html_block html_end_do_cycle`

referenced by:

- [html statement](#)

html\_end\_do\_cycle:

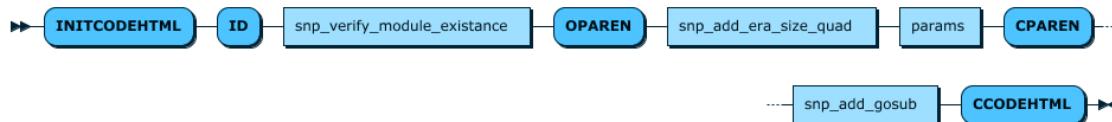


`html_end_do_cycle ::= 'HTMLENDDO' 'OPAREN' expression 'CPAREN' 'CCODEHTML' sfp_do_while_gotot`

referenced by:

- [html do cycle](#)

html\_call:



`html_call ::= 'INITCODEHTML' 'ID' sfp_verify_module_existance 'OPAREN' sfp_add_era_size_quad params 'CPAREN' sfp_add_gosub 'CCODEHTML'`

referenced by:

- [html statement](#)