

(* The start of a nix expression *)

Expression →

(*ExpressionNoAssignment* | *Assignment*)

ExpressionNoAssignment →

(*Attrset* | *Function* | *Arithmetic*)

(* A let .. in or with *)

AssignmentPreamble →

{ (*let-in* | *with*) }⁺,

(* Let in *)

(* (* **let** *a* = 5; **in** ... *) *)

let-in →

`let` { *AssignmentNoPreamble* } `in`

with →

`with`

{ *ExpressionNoAssignment* }⁺ `;`

Inherit →

`inherit` ({ ? *identifier* ? }⁺) `;`

(* Expression of an attrset *)

Attrset →

[*AssignmentPreamble*] `{ { (*Assignment* | *Inherit*) }⁺ }`

(* An assignment *)

(* (* **let** *x* = 5; **in** *a* = *x*; *) *)

Assignment →

[*AssignmentPreamble*] *AssignmentNoPreamble*

(* An assignment without the preamble *)

(* (* *a* = 5; *) *)

AssignmentNoPreamble →

? *someIdentifier* ? `=` *ExpressionNoAssignment* `;`

(* A string, integer or float *)

Primary →

(? *string* ? | ? *integer* ? | ? *float* ? | `true` | `false` | *List*)

List →

`[` *ExpressionNoAssignment* `]`

(* A function *)

(* (* *input*: *output* *) , *)

Function →

[*AssignmentPreamble*] ? *InputIdentifier* ? `:` [*let-in*] *ExpressionNoAssignment* `;`

Arithmetic →

(`(` *ArithmeticOrPrimary* { (`(` | `+` | `*` | `/`) *ArithmeticOrPrimary* } `)` | *ArithmeticOrPrimary* { (`(` | `+` | `*` | `/`) *ArithmeticOrPrimary* })

ArithmeticOrPrimary \rightarrow
 $(\textit{Primary} | (\text{ ` ` Arithmetic ` ` }))$