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(* 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 →
(*Primary* | (` (` *Arithmetic* `)`))