



mila+

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Mila+

- Extension of mila, with:
 - Functions
 - Return statements
 - Optional semicolons
 - Last expression as return statement

```
function a(i, j) i + j
```

```
function a(i, j) begin  
    return i + j;  
end
```



```

MODULE ::= { FUNCTION } { DECLARATION } BLOCK
FUNCTION ::= function ident '(' [ ident {, ident} ] ')' STATEMENT
DECLARATION ::= const ident = number {, ident = number }
                | var ident {, ident }
STATEMENT ::= ident := EXPRESSION
                | write EXPRESSION
                | read ident
                | if EXPRESSION then STATEMENT { else STATEMENT }
                | while EXPRESSION do STATEMENT
                | BLOCK
                | return EXPRESSION
                | EXPRESSION
BLOCK ::= begin { DECLARATION } { STATEMENT } end
EXPRESSION ::= E1 { (= | <> | < | > | <= | =>) E1 }
E1 ::= E2 { (+ | -) E2 }
E2 ::= E3 { ( * | / ) E3 }
E3 ::= { + | - } FACTOR
FACTOR ::= ident
                | number
                | '(' EXPRESSION ')'
                | CALL
CALL ::= ident '(' [ EXPRESSION {, EXPRESSION} ] ')'

```