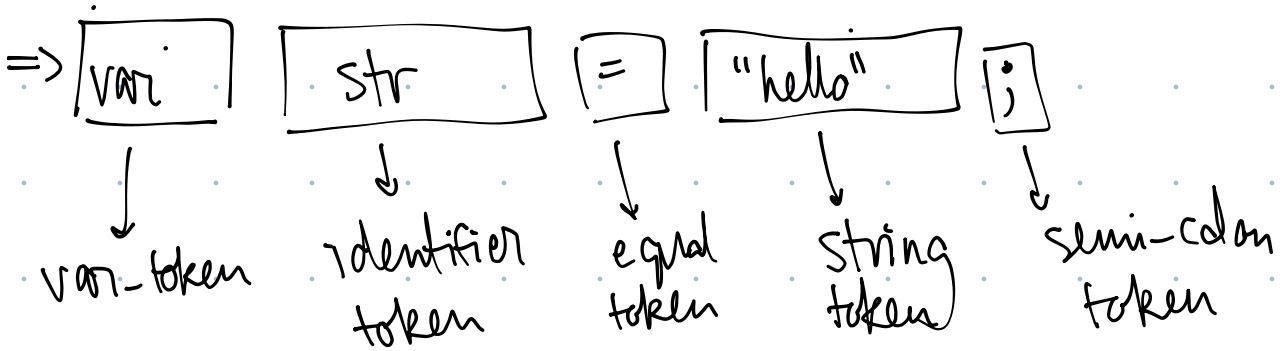
§ Interpreting Pipeline



Compiling → pratt-parser :

VM ⟶ chunk.code: OP_CONSTANT, OP_PRINT

↳ Global Hashmap: NULL

↳ stack: "hello"

↳ Objects Hashmap "hello"

↳ Chunk.constantArray: "hello"

Intepreting Pipeline for the string "hello"

1→ allocates string object or interns to existing object.

2- Gets written to object hashmap in vm to keep track

3- Gets written to Chunk's constant array (lets say index "i")

4- Chunk's bytecode OP_CONSTANT, "i" to keep track of index

5- When VM runs, OP_CONSTANT retrieves "hello" from cst array to push it onto the stack

6- When OP_DEFINE_GLOBAL is called, variable name stored in the array is used to set on VM.global hashmap

Overall,

⇒ VM runs intructions in chunk.code.

⇒ 1. constants array are constants that appear in code

2. pushed onto the stack with OP_CONSTANT and are pushed/popped to be manipulated with other operations

⇒ variables are set on vm.global

N.B: variable names never appear on the stack just called from the constant array