

Source code

```
int x = 5 ;
```

// raw code

Lexer function

int	x	=	5	;
-----	---	---	---	---

// converts the source code into tokens.

Token stream

[int, x, =, 5, ;]

// keep a tokens in list

Parser

```
(=)
 / \
(x) (5)
```

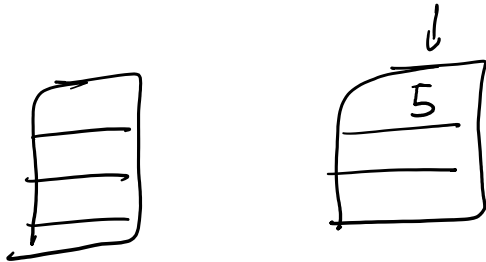
// Syntax Tree Generation

↓
Code generator

* Load	5	//	Load 5 in memory
* Store	x	//	Store value in x

↓
Virtual machine

push into stack



↓
output
 $x = 5.$