

# Beginning Lua

Variables, Expressions, Statements, Blocks

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**pluralsight**   
hardcore developer training

# The Guess My Number Game



*"Psst... over here kid. I'm Lou, but my friends call me Luay. \$5, guess my number and double it. Easy money kid, easy money."*

# Types

- 8 basic types

- nil
- boolean
- number
- string
- userdata
- function
- thread
- table



*“The tools of my trade, kid. This is where the magic happens.”*

# Variables and Assignment

Declare variables just by  
assigning them

Lua supports multiple  
assignment

Luay = “Con Man”

$X = 1$

$Y = 2$

$X, Y = Y, X$  -- Swap!

Bonus: ‘--’ is a  
single  
line comment



*“Where is the ball kid? First it was X, then it was Y.”*

# Expressions

- Expression = value
- Types of expressions:
  - Numeric constants
  - String literals
  - Variables
  - Unary and binary operations
  - Function calls
  - Function definitions
  - Table constructors



*You have to be in control of your expressions*

We'll talk about these later

# Operators

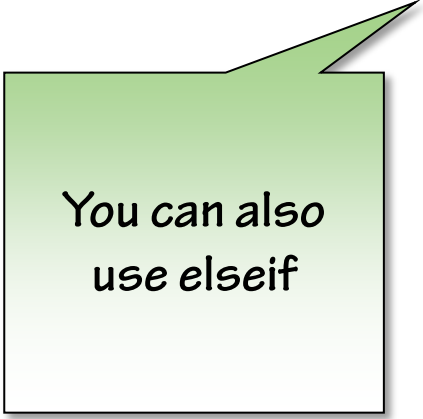
- **Arithmetic** (+, -, \*, /, ^, %)
- **Relational** (<, >, <=, >=, ==, ~=)
  - Note: not equal is ~= in Lua
- **Logical** (and, not, or)
- **Other**
  - Concatenation
    - "Hi " .. "there"
  - Length
    - #suckers



*"If you'd like to make a call please hang up and dial again..."*

# If, Then, Else

```
if boolean expression then  
    --do something  
else  
    --do something else  
end
```



You can also  
use elseif

# Loops

- While – while *boolean expression* do something end
- Repeat – repeat something until *boolean expression*
- For (Numeric) – for *variable = start, end, step* do something end
- For (Generic) – for *k, v in iterator* do something end





# Blocks and Scope



*In Lua, it is global by default..*

# Up Next



*“Hey kid, check out what else I got for ya right here.”*