

Beginning Lua

Functions and Data Structures

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pluralsight 
hardcore developer training

Functions

```
- function getRandomNumber(maxValue)
  math.randomseed(os.time())
  math.random()
  return math.random(maxValue)
end

- function handleGuesses(...)
  lowMessage, highMessage, number = ...

  local guesses = {}

  while answer ~= number do
    local answer = io.read("*n")
    guesses[#guesses+1] = answer

    if answer < number then
      print(lowMessage)
    elseif answer > number then
      print(highMessage)
    else
      break
    end
  end

  print "Guess again"
end

return guesses
end
```

Functions in Lua are first class citizens, that means they are like any other type

Variadic Functions

Takes any number
of parameters

```
function countStringLengths(...)  
  -- do stuff  
  a,b,c = ...  
end
```

Access params
inside function

Using Functions as Data

When we write:

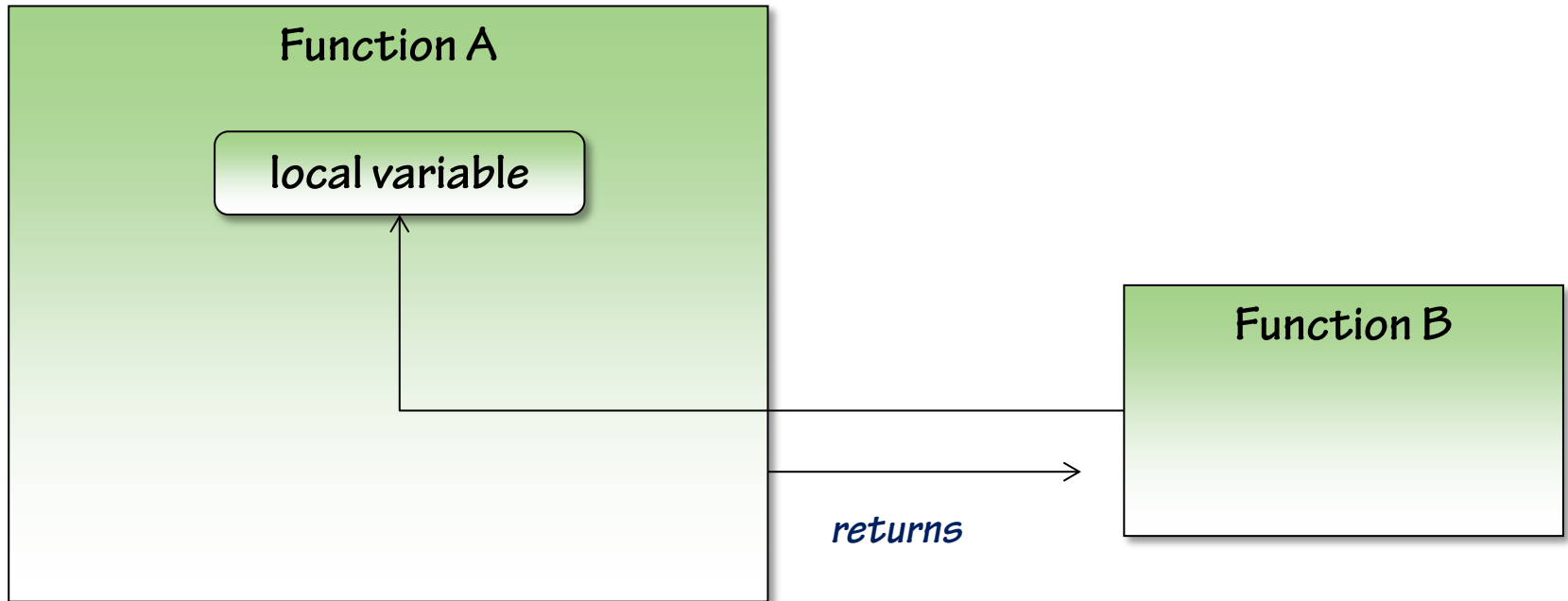
```
function askQuestion(q)
    -- do stuff
end
```

It really means:

```
askQuestion = function(q)
    -- do stuff
end
```

All functions we declare are actually stored in variables

Closures



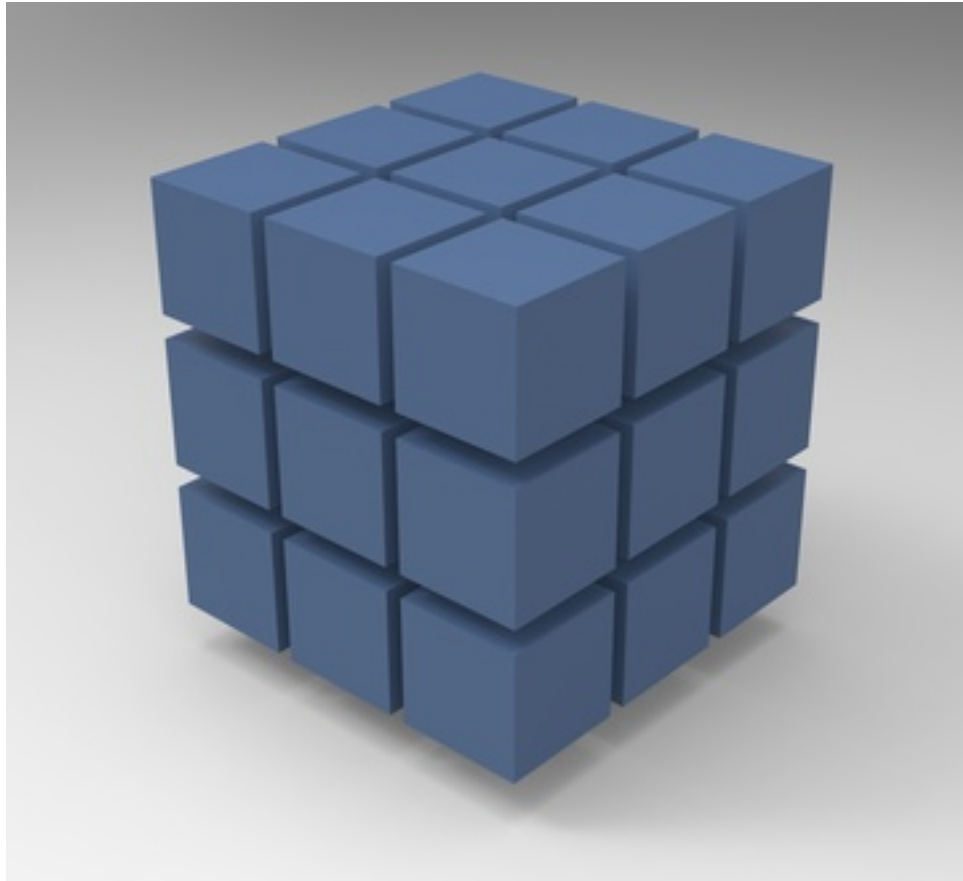
Even though Function A is out of scope, Function B can still access Function A's local variable

Tables



A table is an extremely flexible data structure

Other Data Structures



Just about any data structure can be created with a table

Up Next



Cat



Dog



AccountsPayableTrasactionManager