

Variadic Functions



Variadic Functions



A function in Lua can be *variadic*, that is, it can take a variable number of arguments.

Variadic Functions



As a simple example, the following function returns the summation of all of its arguments:

```
function add (...)  
  local s = 0  
  for _, v in ipairs{...} do  
    s = s + v  
  end  
  return s  
end
```

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```
function add (...)  
  local s = 0  
  for _, v in ipairs{...} do  
    s = s + v  
  end  
  return s  
end
```

The three dots (...) in the parameter list indicate that the function is variadic.

Variadic Functions



In Lua, the **ipairs** iterator returns two values during each iteration: the index and the corresponding value of a table. It is used to traverse arrays or tables with consecutive integer keys starting from 1. Example:

```
local myTable = {10, 20, 30}
for index, value in ipairs(myTable)
do
    print(index, value)
end
```

1 10
2 20
3 30