

Python's Next Decade and Us







PHP

USING A FUNCTION

A function, sometimes referred to as a subroutine, contains a block of code that performs a specific task, such as displaying a message. Using functions makes it easy to re-use sections of code in a PHP page. For example, you may have a function that displays a warning message when a client enters invalid data into a form. Instead of retyping the section of code that displays the message for each field in the form, you can simply re-use the function.

Functions also allow you to group lines of code into smaller, more manageable sections. This makes it easier to understand and troubleshoot the code.

A function is created using the `function` keyword followed by the name of the function and a set of parentheses. A function name must start with a letter or an underscore (`_`) character. The name should identify the purpose of the function or describe the action the function performs.

It is common to have a function name begin with a capital letter. If the name consists of multiple words, you can

USING A FUNCTION

```
[Untitled - Notepad]
File Edit Search Help
<html>
<head>
<title>Using a Function</title>
</head>
<body>

<?php
function MyMessage()
{
$userName = "Tom";
if ($userName != "")
{
    print "Hello $userName,<br>";
}
else
{
    print "Hello new visitor,<br>";
}
?>

</body>
</html>
```

```
[Untitled - Notepad]
File Edit Search Help
<html>
<head>
<title>Using a Function</title>
</head>
<body>

<?php
function MyMessage()
{
    print "Welcome to my Web page!<br>";
}

$userName = "Tom";
if ($userName != "")
{
    print "Hello $userName,<br>";
}
else
{
    print "Hello new visitor.<br>";
}
?>

</body>
</html>
```

- ## CREATE A FUNCTION

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APPENDIX

You can call a function from within another function. When calling other functions from within a function, you should be careful not to generate a loop that causes the functions to continuously call each other.

TYPE TH

```
function WelcomeMessage()
{
    print "Welcome to my Web page!<br>
}
function DisplayIntroduction()
{
    WelcomeMessage();
    print "My name is Martine.<br>";
}
DisplayIntroduction();
```

RESULT

Welcome to my Web page!
My name is Martine.

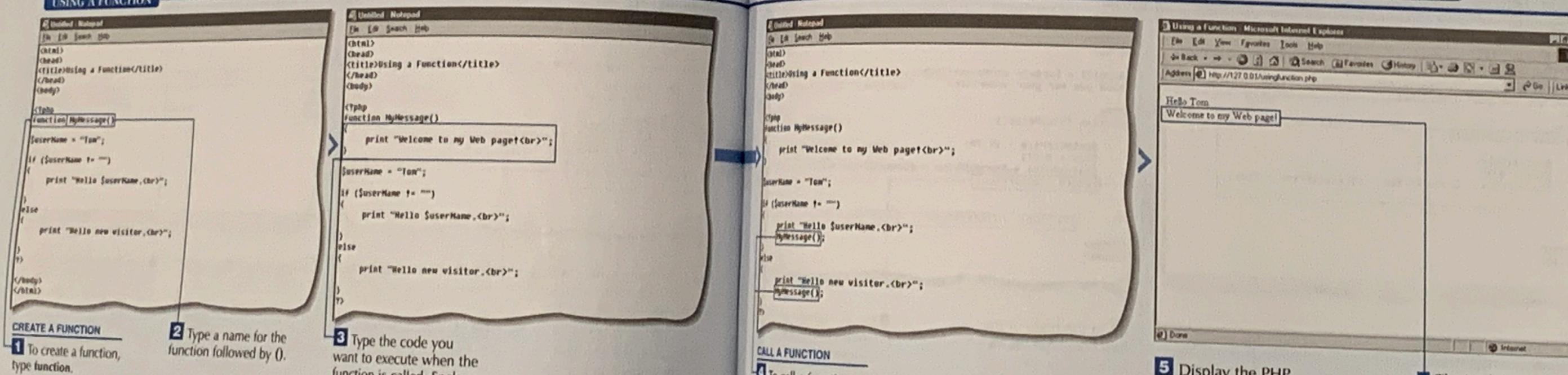
When creating a function, you should keep in mind that any variables created within the function can be accessed only within that function. The function's variables will not be accessible to other functions or other sections of code in the PHP page.

TYPE TH

```
function SetPageTitle()
{
    $pageTitle = "Martine's Home Page";
}
function DisplayWelcome()
{
    print "Welcome to $pageTitle<br>";
}
DisplayWelcome();
```

RESULT

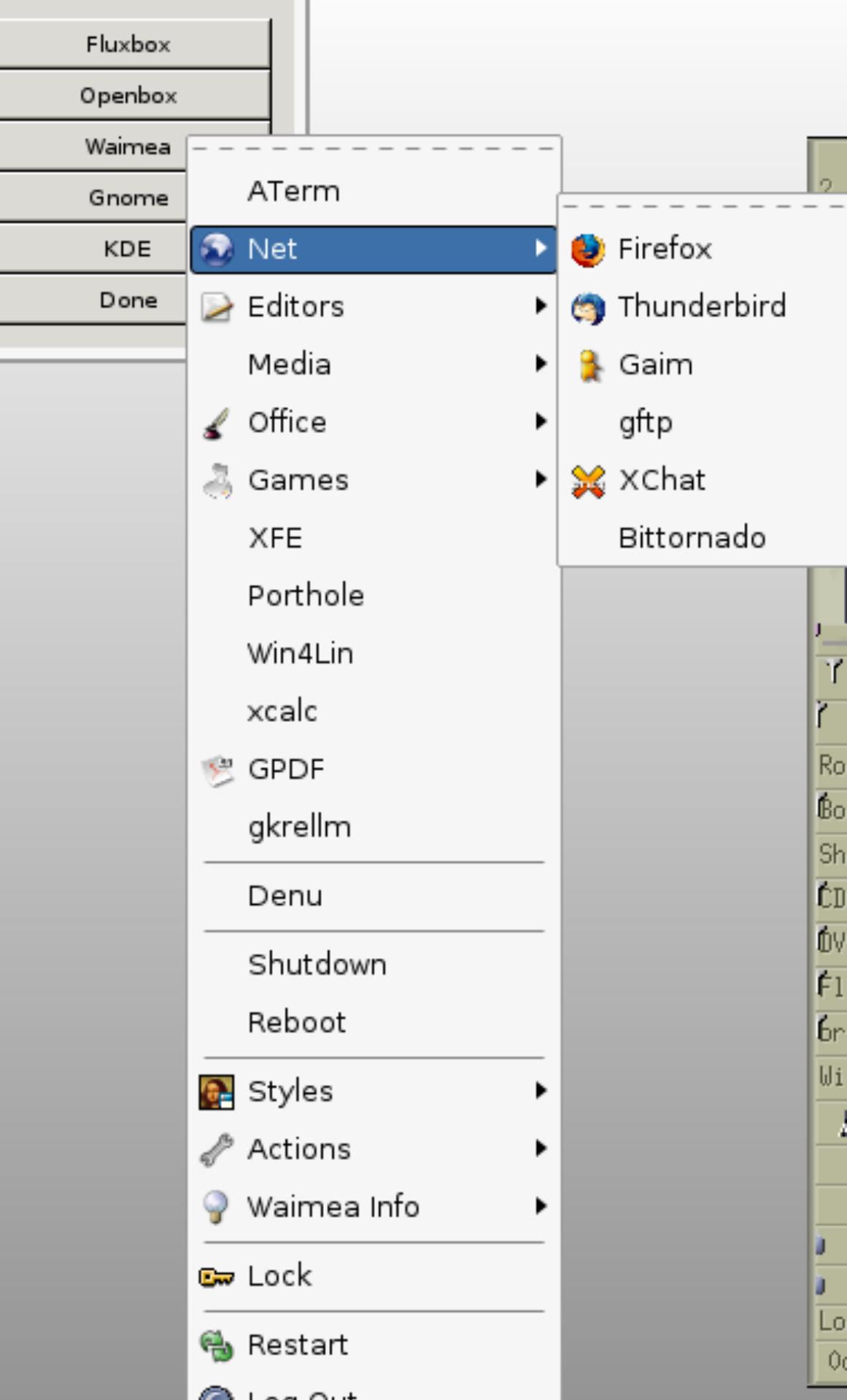
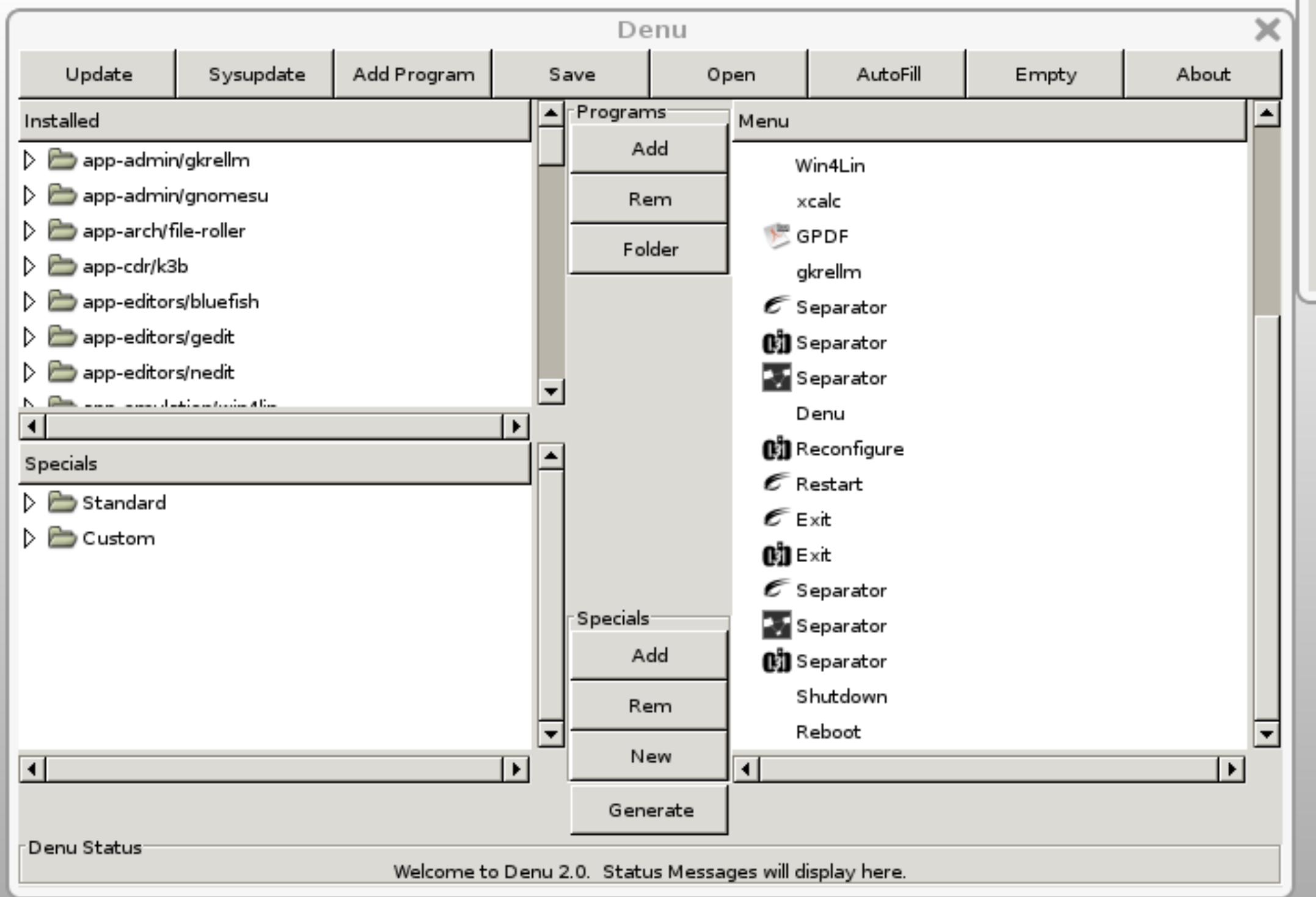
Welcome to



- 4** To call a function, type the function name followed by () .

5 Display the PHP page in a Web browser.

- The Web browser displays the result of the function.



What about you?



Most Popular Technologies

Programming, Scripting, and Markup Languages

All Respondents

Professional Developers



Clojure 1.4% 

WebAssembly 1.2% 

87,354 responses; select all that apply

For the seventh year in a row, [JavaScript](#) is the most commonly used programming language, but [Python](#) has risen in the ranks *again*. This year, Python just edged out Java in overall ranking, much like it surpassed C# last year and PHP the year before. Python is the fastest-growing major programming language today.

Clojure 1.4% 

WebAssembly 1.2% 

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87,354 responses

7,794,799,000 people



Most Popular Technologies

Programming, Scripting, and Markup Languages

All Respondents

Professional Developers

Not Coders **99.99%**

Coders **0.001%**

23,900,000 developers



Most Popular Technologies

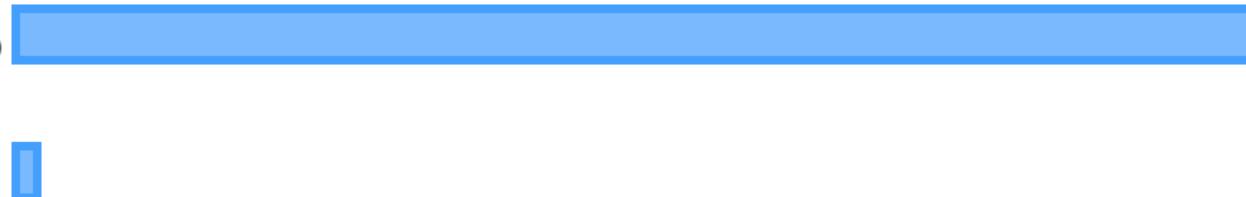
Programming, Scripting, and Markup Languages

All Respondents

Professional Developers

Not Coders **99.69%**

Coders **0.31%**



261,000,000



vs

1,524,838,000





Most Popular Technologies

Programming, Scripting, and Markup Languages

All Respondents

Professional Developers

Not Coders **99.53%**

Coders **0.47%**



Rust

[GET STARTED](#)

A language empowering everyone to build reliable and efficient software.

[Version 1.41.0](#)

Why Rust?

Performance

Rust is blazingly fast and memory-efficient: with no runtime or garbage collector, it can power performance-critical services, run on embedded devices, and easily integrate with other

Reliability

Rust's rich type system and ownership model guarantee memory-safety and thread-safety — enable you to eliminate many classes of bugs at compile-time.

Productivity

Rust has great documentation, a friendly compiler with useful error messages, and top-notch tooling — an integrated package manager and build tool, smart multi-editor support with auto-



Rust's Community Automation

6/28/2016



talks.edunham.net/codeconfLA2016

@qedunham

codeconfLA@edunham.net

https://youtu.be/407nwX6__70

Languages

The React documentation is available in the following languages:

Arabic

[العربية](#)

[Contribute](#)

Azerbaijani

[Azərbaycanca](#)

[Contribute](#)

English

[English](#)

[Contribute](#)

Spanish

[Español](#)

French

[Français](#)

Italian

[Italiano](#)

The Lorenz Differential Equations

Before we start, we import some preliminary libraries. We will also import (below) the accompanying `lorenz.py` file, which contains the actual solver and plotting routine.

```
[ ]: %matplotlib inline  
from ipywidgets import interactive, fixed
```

We explore the Lorenz system of differential equations:

$$\begin{aligned}\dot{x} &= \sigma(y - x) \\ \dot{y} &= \rho x - y - xz \\ \dot{z} &= -\beta z + xy\end{aligned}$$

Let's change (σ, β, ρ) with ipywidgets and examine the trajectories.

```
[ ]: from lorenz import solve_lorenz  
w=interactive(solve_lorenz,sigma=(0.0,50.0),rho=(0.0,50.0))  
w
```

For the default set of parameters, we see the trajectories swirling around two points, called attractors.

The object returned by `interactive` is a `Widget` object and it has attributes that contain the current result and arguments:

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```
# Python 3: List comprehensions
>>> fruits = ['Banana', 'Apple', 'Lime']
>>> loud_fruits = [fruit.upper() for
fruit in fruits]
>>> print(loud_fruits)
['BANANA', 'APPLE', 'LIME']
```



Compound Data Types

Lists (known as arrays in other languages) are one of the compound data types that Python understands. Lists can be indexed, sliced and manipulated with other built-in functions. [More about lists in Python 3](#)

```
# List and the enumerate function
>>> list(enumerate(fruits))
[(0, 'Banana'), (1, 'Apple'), (2,
'Lime')]
```

[1](#)[2](#)[3](#)[4](#)[5](#)

**What will Python be in 10
years?**

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**Computing's
Python's Next
Decade and Us
Everyone**