

Python

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What is Python?

- Programming language
 - Tells a computer how to do something.
 - It is focused on readability
 - `print("something")`
 - Object-oriented programming
 - Program based upon things or “objects” (i.e. sequences, variables, files, etc.)
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The Zen of Python

- Beautiful is better than ugly.
 - Explicit is better than implicit.
 - Simple is better than complex.
 - Complex is better than complicated.
 - Readability counts.
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Why Python?

- In truth, it doesn't really matter.
 - If you're going to code you need to start somewhere.
 - Python has an easier syntax than Perl or C or Ruby.
 - Python code is easy to use for beginners due to its intuitive design. Python is unlike other programming languages in that it uses indentation to identify blocks of code.
 - It is a better starting point for non-programmers.
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Can you read this?

Perl

```
my_file = open("dna.txt")  
file_contents = my_file.read()  
print(file_contents)
```

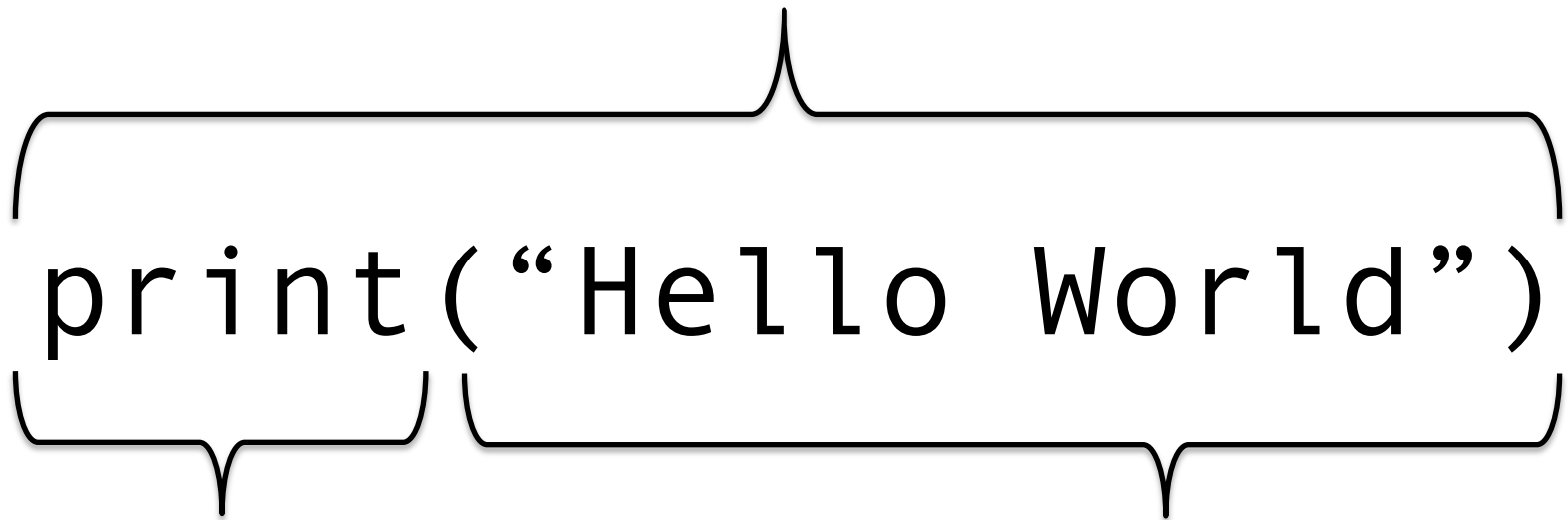
Perl

```
$my_file = &open("dna.txt");  
$file_contents = $my_file->{read}-  
>();  
print $file_contents;
```

Basics

- Two versions of Python
 - Python 2
 - Python 3
 - Big difference is print function and numbers
 - `print “Hello World!”` #Python2
 - `print(“Hello World!”)` #Python3
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statement



```
print("Hello World")
```

function

argument

Python for Biologists



Helping biologists metamorphose into programmers

Dr. Martin Jones
