

# Language Basics

CS105 : Saelee

Learning a **new language**

русский

漢字

# Characters “Character Set”

ひらがな

Roman

# Spelling & Grammar “Syntax”

English

*subject verb object*

*noun phrase*

*determiner adjective noun*

# Meaning “Semantics”

Declarative

“I love ice cream”

Imperative

“Jump on the table”

Interrogative

“What do you mean?”

Ambiguous

“I saw her duck”

“I saw the man on the hill  
with a telescope.”

Computers are stupid!

*“Toss-up”*

*“Dime a dozen”*

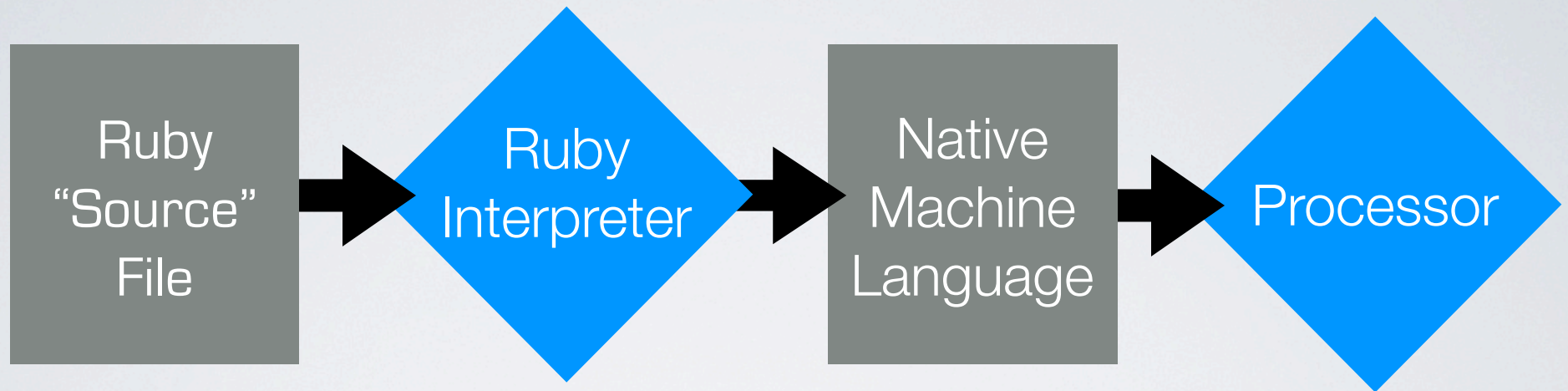
# Common Expressions “Idioms”

*“Piece of cake”*

*“Cold turkey”*

“English” ideas  
Ruby code

# Syntax errors



# The Ruby Interpreter

simple to detect

Semantic errors  
Logical  
“Bugs”

# Debugging

```
puts 'hello'
```

Output

English: verb object

Ruby: method argument

method arg

method(arg)

method arg1, arg2, ...

method(arg1, arg2, ...)

```
puts 'hello'  
puts "hello"  
puts('hello')  
puts("hello")  
puts( "hello" )  
puts "hel" + "lo"  
puts "hello", "bye"
```

```
puts 105  
puts(105)  
puts( 105 )  
puts 100 + 5  
puts "hello", 105
```

Demo