Operators in Swift

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Operator?

Operator!

Language constructs which behave generally like functions, but differ syntactically or semantically from usual functions
— Wikipedia

...in Swift?

An operator is a special symbol or phrase that you use to check, change, or combine values.
– The Swift Programing Language

...in Swift!

- Assignment, logic, math, binary, overflow, range;

- Unary, binary, ternary;

- Prefix, infix, postfix;

- Precedence

- Associativity

Overloading & custom operators

- Define operator

  - Associativity, assignment, precedence

- Implement function

  - Arguments define applicability

  - Overrides operators within the module

  - inout for assignment

Guidelines

- Clarity

- Simplicity

- Analogy

- Order of execution

Demo

Shortcoming

- Why bother? What's wrong with functions?

- No unicode in operator names. Where is my `image.`😽?

- No way to create ternary operators

- No scopes: `Cartography` - auto layout done with custom operators

Conclusion

To get around clashes when operator overloading, we should all just give them a three letter prefix
— @danielctull