

# Awesome Operators

In Perl 6 we  
have a few new  
**operators...**

# Junctions

```
if $status eq 'error' || $status eq 'warning' {  
    ...  
}
```

# Junctions

```
if $status eq 'error' || $status eq 'warning' {  
    ...  
}
```

```
if $status eq 'error' | 'warning' {  
    ...  
}
```

# Junctions

```
while $value < $limit1 && $value < $limit2 {  
    ...  
}
```

# Junctions

```
while $value < $limit1 && $value < $limit2 {  
    ...  
}
```

```
while $value < $limit1 & $limit2 {  
    ...  
}
```

# Sequences

say 1, 2, 4 ... 1024;

1 2 4 8 16 32 64 128 256 512 1024

# Sequences

```
my @fib = 1, 1, ** ... *;  
say @fib[0..9]
```

1 1 2 3 5 8 13 21 34 55 89



# ^ (zero up to...)

```
my @fib = 1, 1, ** ... *;  
say @fib[^10]
```

1 1 2 3 5 8 13 21 34 55 89

**Awesome**

**Meta-operators**

# Higher order operators

**Operators that  
operate on  
operators**

# Reduction

Puts an operator between every element in a list

```
say [*] 1..10
```

```
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```

# Reduction

```
my @sorted = 1,4,7,9,11;  
my @unsorted = 3, 1, 9, 25;
```

```
say [<] @sorted;  
say [<] @unsorted;
```

Bool::True

Bool::False

# Zip

Take elements from two or more lists and  
combine them with some operator

```
say 1 .. 6 z~ 'A' .. 'F'
```

```
1A 2B 3C 4D 5E 6F
```

# Cross

All permutations of two or more lists,  
combined with some operator

say 1 .. 3 X~ 'A' .. 'F'

1A 1B 1C 1D 1E 1F 2A 2B 2C 2D 2E 2F  
3A 3B 3C 3D 3E 3F



**Your**  
**Awesome**  
**Operators**

**What if Perl 6  
built in  
operators are  
not enough?**

**You can**  
**add your own!**

# Factorial

Add a ! operator to do factorial

```
sub postfix:<!>($n) { [*] 1..$n }  
say 10!
```

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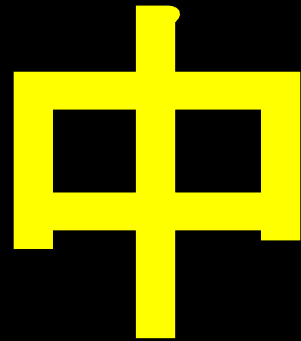
**And you have  
all of unicode!**

# Insert In Middle

Operator to add an element to the middle  
of an array

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# Insert In Middle

```
sub infix:<中>(@array, $ins) {  
    @array.splice(+@array / 2, 0, $ins);  
    return @array;  
}
```

```
my @a = 1,2,4,5;  
say @a 中 3;
```

1 2 3 4 5



**Thanks!**

