

Gosh: the Goal-Oriented Shell

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The basic command shell interface for POSIX-style systems has changed little since the original **sh** program written by Stephen Bourne. A modern script in **zsh** is largely identical. During that time, many "scripting languages" have been created to provide more complete programming facilities than those available in command shells.

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4 CONFIGURATION AS CODE

5 PARSING

6 CALLING RACKET AND OTHER LANGUAGES

7 IMPLEMENTATION

8 EXAMPLES

8.1 Collection intersection

```
(fun intersect[$x, $y] -> @(^$x == ^$y) end)[[1, 2, 3], [2, 3, 4]]  
⇒ [2, 3]
```

8.2 Collection intersection with function shorthand

```
@({^$1 == ^$2}[[1, 2, 3], [2, 3, 4]])  
⇒ [2, 3]
```

8.3 The first 6 prime numbers

```
==> $p <- @*(2||3::%1+2 when !(% rem (^$p while % * % <= %) == 0) while % < 17)  
⇒ [2, 3, 5, 7, 11, 13]
```

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