

NAMING THINGS

there are only two **hard** things in computer science

cache invalidation and

naming things

- *Phil Karlton*

NOT IDIOMATIC

Unnecessarily verbose

```
func Read(buffer *Buffer, inBuffer []byte) (size int, err error) {  
    if buffer.empty() {  
        buffer.Reset()  
    }  
  
    size = copy(  
        inBuffer,  
        buffer.buffer[buffer.offset:])  
  
    buffer.offset += size  
    return size, nil  
}
```

IDIOMATIC

Concise and idiomatic

```
func Read(b *Buffer, p []byte) (n int, err error) {  
    if b.empty() {  
        b.Reset()  
    }  
  
    n = copy(p, b.buf[b.off:])  
  
    b.off += n  
  
    return n, nil  
}
```

ABBREVIATIONS

Common abbreviations used in Go

var s string	// string
var i int	// index
var num int	// number
var msg string	// message
var v string	// value
var val string	// value
var fv string	// flag value
var err error	// error value
var args [] string	// arguments
var seen bool	// has seen?
var parsed bool	// parsing ok?

ABBREVIATIONS

Common abbreviations used in Go

var buf [] byte	// buffer
var off int	// offset
var op int	// operation
var opRead int	// read operation
var l int	// length
var n int	// number or number of
var m int	// another number
var c int	// capacity
var c int	// character
var a int	// array
var r rune	// rune
var sep string	// separator

ABBREVIATIONS

Common abbreviations used in Go

```
var src int           // source
var dst int           // destination
var b byte            // byte
var b []byte          // buffer
var buf []byte        // buffer
var w io.Writer        // writer
var r io.Reader       // reader
var pos int           // position
```

...list goes on and on...

Why naming is important?



Critical for Readability = Maintainability





Use the first few letters of the words



```
var fv string // flag value
```




Use fewer letters in smaller scopes



```
var bytesRead int // number of bytes read
```



```
var n int // number of bytes read
```





Use the complete words in larger scopes



```
package file  
var fileClosed bool
```




Use mixedCaps like this



```
type PlayerScore struct
```




Use all **capitals** for **acronyms**



```
var localAPI string
```



```
var localApi string
```





Do not stutter



player.PlayerScore ✗

player.Score ✓



Do not use under_scores oR LIKE_THIS



const MAX_TIME **int** ✗

const MaxTime **int** ✓

const N **int** ✓