



**Learning Object-Oriented  
Programming and Design with TDD**

# Understanding Messages Sequence and Cascade

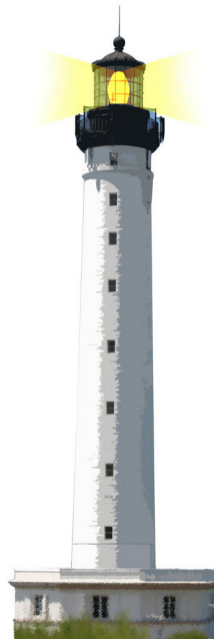
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<http://www.pharo.org>

**W2S04**



# Expression Sequence

. is a separator

```
expression1.  
expression2.  
expression3
```

Example

```
Transcript cr.  
Transcript show: 1.  
Transcript show: 2
```

# Expression Sequence

- . is a separator, not a terminator
- no need to put one at the end
- no point after temporary variable declaration

```
| macNode pcNode |  
macNode := Workstation withName: #mac.  
macNode sendPacket: 'Hello World'
```

# Cascade: Sending Multiple Messages to an Object

```
Transcript cr.  
Transcript show: 1.  
Transcript show: 2
```

is equivalent to:

```
Transcript  
  cr ;  
  show: 1 ;  
  show: 2
```

- ; is called a cascade



# Cascade Example

## Sending Multiple Messages to an Object

```
| c |  
c := OrderedCollection new.  
c add: 1.  
c add: 2
```

is equivalent to:

```
OrderedCollection new  
  add: 1 ;  
  add: 2
```

- **add: 2 is sent to the receiver of message add: 1**
- **this receiver is the instance of OrderedCollection**



# What You Should Know

- . is a separator
- ; (cascade) is useful to avoid repeating the receiver
- the cascade returns the last message returned value



# Resources

- Pharo Mooc - W2S04 Videos <http://mooc.pharo.org>
- Pharo by Example <http://books.pharo.org>



A course by Stéphane Ducasse  
<http://stephane.ducasse.free.fr>

Reusing some parts of the Pharo Mocc by

Damien Cassou, Stéphane Ducasse, Luc Fabresse  
<http://mocc.pharo.org>



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