

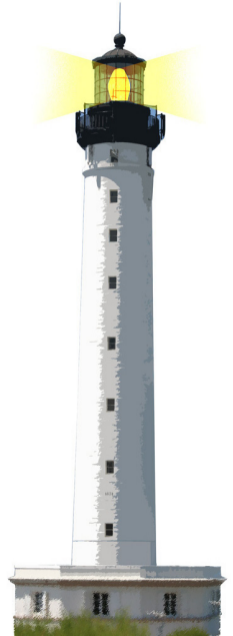
# Parentheses Vs. Square Brackets

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# ( ) vs. [ ]

- ( ) just changes the priority of an execution but the program is executed
- [ ] blocks program execution: the program is NOT executed



# Use [ ] for 'Unknown' Execution Occurrence

Use [ expressions ] when:

- expressions **may not be executed** at all (if, and, ...)
- expressions **may be executed multiple times** (while, ...)



# Example

```
n timesRepeat: [ self doSomething ]
```

timesRepeat: executes a number of times its argument,  
therefore the argument is a block



## ( ) vs. [ ] Example

```
x isNil ifTrue: [ self doSomething ]
```

ifTrue: may execute or not its argument, therefore the argument is a block



## ( ) vs. [ ] Example

```
[ self start ] whileTrue: [ self doSomething ]
```

whileTrue: may execute both its receiver and argument multiple times, therefore they are both a block



# Quiz

1 to: n do: ... **self** doSomething ...

x ifEmpty: ... **self** doSomething ...

# Quiz

```
1 to: 100 do: [:i | self doSomething]
```

```
x ifEmpty: [ self doSomething ]
```



# Summary

- `()` is about changing the order of a computation
- `[]` is freezing the computation and controlling it



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