Blocks

- Blocks
  - Objects
  - Can be assigned to variables.
  - Can take arguments
  - Represents a deferred sequence of actions
    - The actions inside a block can be executed at a later time
    - Allow to send the block to other objects
  - To perform action
    - The actions inside a block can be executed by sending it the **value** message.

```
|block result|
block := [:a| a := a * 5.
].
result := block value: 10.
```

What happens if we change to:

b := a * 5

where b is an instance variable?

Blocks

- What happens to b and c if the block of code passes to another object?

- E.g.

AnotherObj

```
|block anotherobj c|
b := 7.
c := 5.
block := [:a| b := a * 5.
c:= b – 1.].
anotherobj := AnotherObj new.
anotherobj getBlock: block.
Transcript show: b asString;cr;
show: c asString.
```

not a local variable

```
getBlock: block
|result b c|
b := 0. c := 0.
result := block value: 100.
b := 0. c := 0.
```

local variable

包括了左边的 b和c，和 local variable 列表

What will be the output?

500

499

Why?

Closure