

METASIN

WE MAKE SOFTWARE

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clojure bootcamp



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clojure bootcamp

agenda

09:00 intro to clojure

| 2:00 lunch

| 3:00 web app with clojure

| 4:30 break

| 5:00 hands on, qa, copter, stuff...

| 7:00 go home



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?



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simple:

```
(println "Hello, world!")  
; prints: Hello, world!
```

functional:

```
(filter odd? [1 2 3 4 5 6])  
;=> (1 3 5)
```

strongly typed:

```
(+ 5 "5")  
; throws:  
;   ClassCastException java.lang.String cannot  
;   be cast to java.lang.Number
```

java interop:

```
(class "Greetings, earthlings")  
;=> java.lang.String  
  
(.toUpperCase "Hello, world")  
;=> "HELLO, WORLD"
```

compiled:

```
(defn show-time []  
  (println (System/currentTimeMillis)))  
  
(instance? java.lang.Runnable show-time)  
;=> true  
  
(def t (new java.lang.Thread show-time))  
(.start t)  
; prints: 1389692362338
```

dynamic:

```
(hello "Jarppe")  
; throws:  
;   CompilerException java.lang.RuntimeException: Unable to  
;   resolve symbol: hello  
  
(defn hello [user-name]  
  (println "Hello," user-name))  
  
(hello "Jarppe")  
; prints: Hello, Jarppe  
  
(defn hello [user-name]  
  (println "Greetings," user-name))  
  
(hello "Jarppe")  
; prints: Greetings, Jarppe
```



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simple:

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functional:

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dynamic:

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; throws:  
;   CompilerException java.lang.RuntimeException: Unable to  
;   resolve symbol: hello  
  
(defn hello [user-name]  
  (println "Hello," user-name))  
  
(hello "Jarppe")  
; prints: Hello, Jarppe  
  
(defn hello [user-name]  
  (println "Greetings," user-name))  
  
(hello "Jarppe")  
; prints: Greetings, Jarppe
```



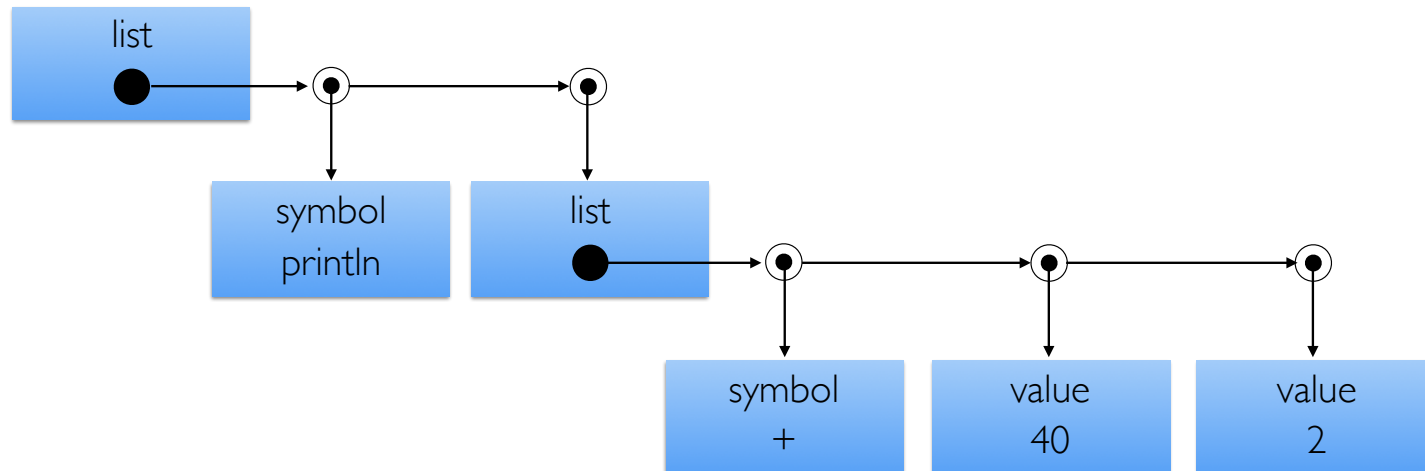


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interactive:

```
user=> (println (+ 40 2))
```

I: READ



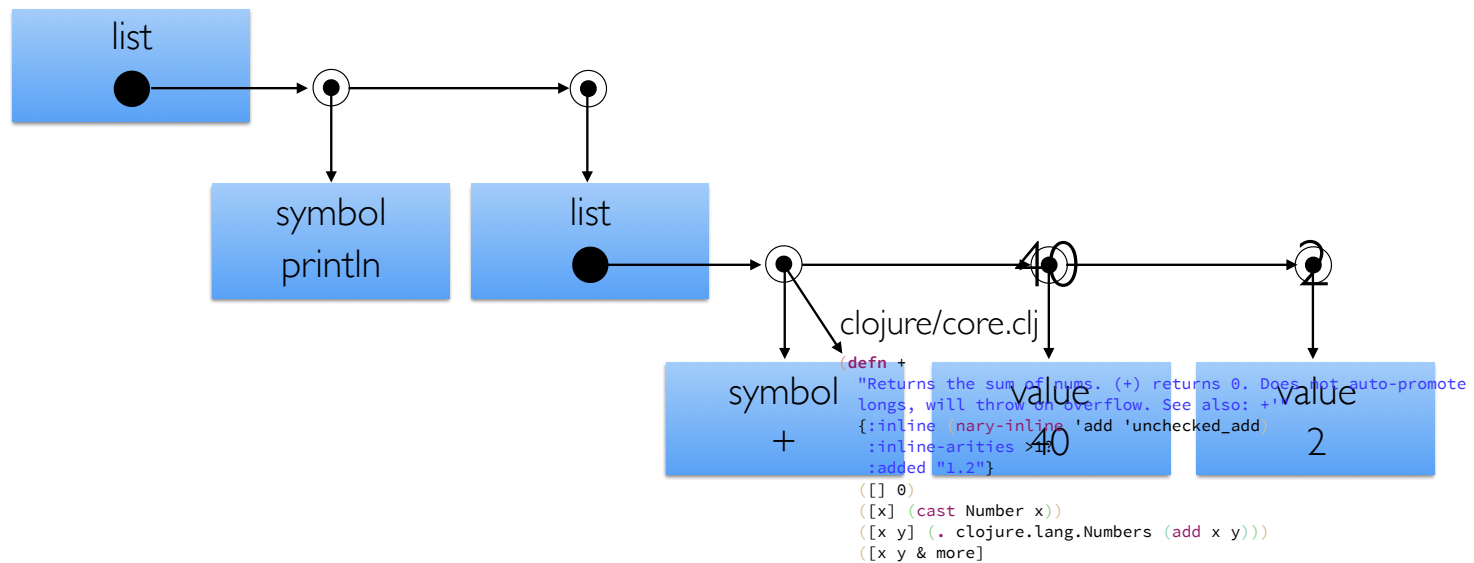


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interactive:

```
user=> (println (+ 40 2))
```

1: READ 2: EVALUATE



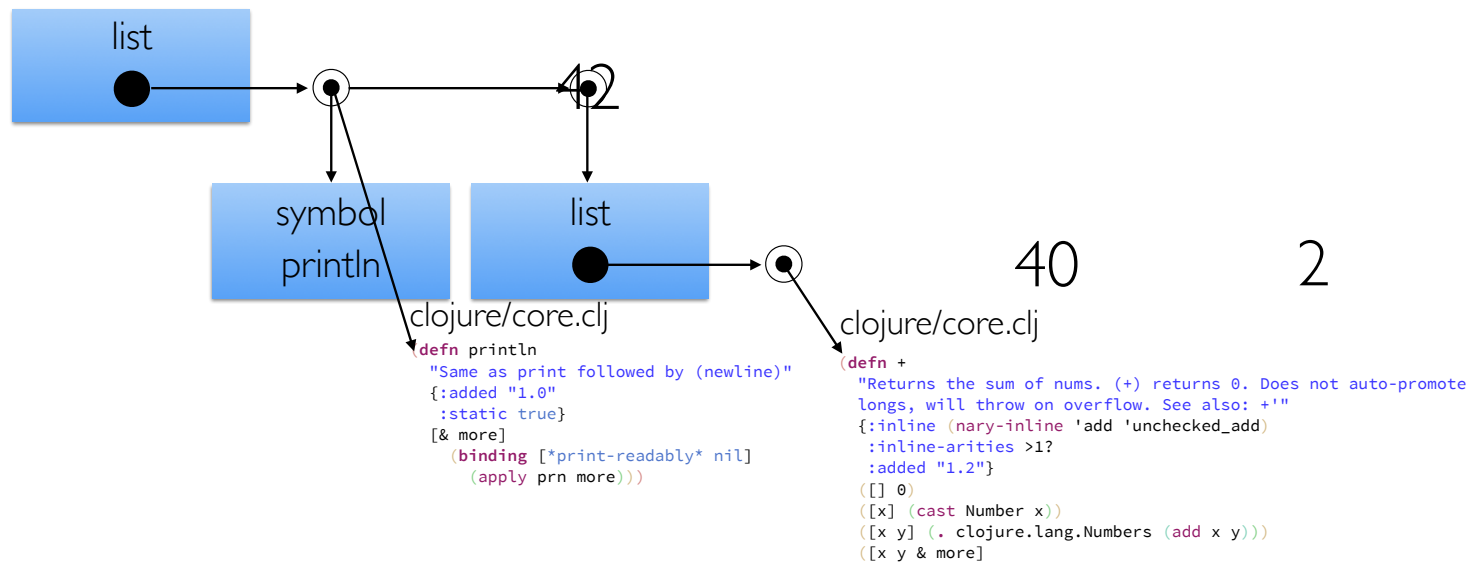


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interactive:

user=> (println (+ 40 2))

1: READ 2: EVALUATE



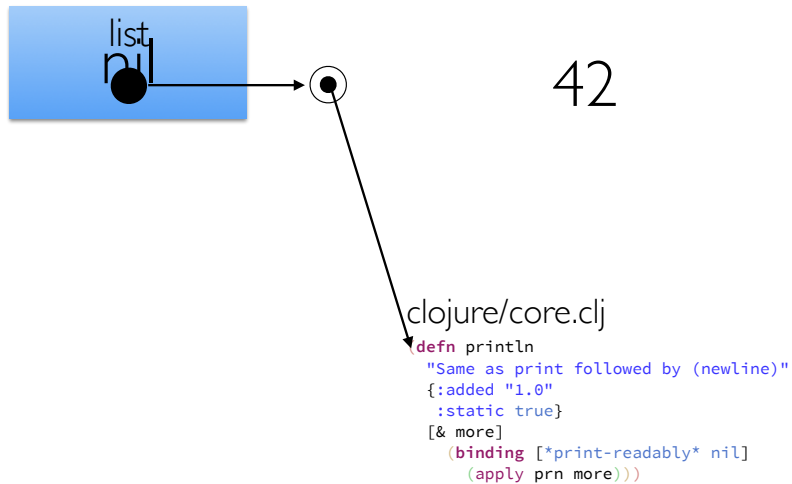


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interactive:

```
user=> (println (+ 40 2))  
42
```

1: READ 2: EVALUATE





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interactive:

```
user=> (println (+ 40 2))  
42  
nil
```

1: READ 2: EVALUATE 3: PRINT

nil



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interactive:

```
user=> (println (+ 40 2))  
42  
nil  
user=>
```

1: READ 2: EVALUATE 3: PRINT 4: LOOP



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interactive:

```
user=> (println (+ 40 2))  
42  
nil  
user=>
```

1: READ 2: EVALUATE 3: PRINT 4: LOOP

REPL



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tools

IDE:

eclipse (counterclockwise)

idea (la clojure, cursive)

emacs (nrepl, cider)

vim

light table

build:

leiningen

gradle

maven

more: dev.clojure.org/display/doc/Clojure+Tools



commence hacking



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commence hacking

```
$ git clone https://github.com/metosin/clojure-bootcamp-intro.git  
$ cd clojure-bootcamp-intro  
$ lein deps
```

eclipse

```
$ lein eclipse
```

import -> existing project

configure -> convert to Leiningen project

IDEA

```
$ lein idea
```

???



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resources

<http://clojure.github.io/clojure/>

<http://clojure.org/cheatsheet>

<http://clojure-doc.org>

<http://clojuredocs.org>

<http://clojurewerkz.org>

