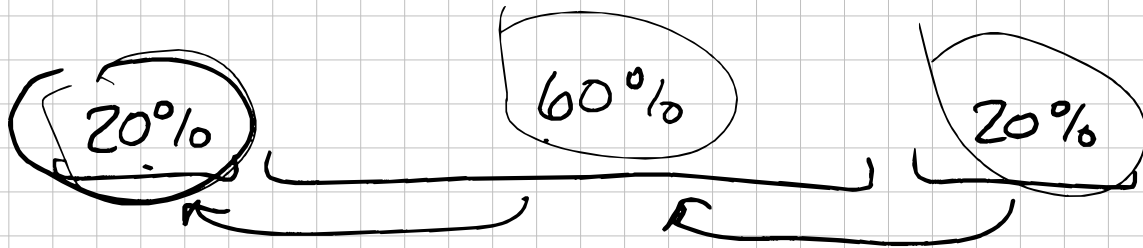


CSE114A

Lecture 13

agenda:

- midterm
- functions in Nano



let $x = 5$
in $x + 3$

to evaluate this:

- evaluate the body $(x + 3)$
- in an extended environment that contains a binding for x .

let $x = 5$
in let $y = x + 3$
in $y + 1$

x .
↑
actually
the
evaluated
value
value
 x is bound to.

let $f = \lambda x \rightarrow x + 5$
in $f 3$

evaluate the body $f 3$
in an environment that knows that $f = \lambda x \rightarrow x + 5$

$[("x", 3), ("y", 4)]$

$[("f", \text{environment}), ("x", 3), \dots]$

let $n = 42$ in
let $f = \lambda x \rightarrow n + x$ in
let $n = 1$ in
 $f 2$