

last.

over t

$$\text{parent}_b = \text{last\_tag\_open} = a.$$

$$\text{last\_tag\_open} = b.$$

function b

$$\text{last\_tag\_open} = \text{parent}_b = a$$

over f

$$\text{parent}_f = \text{last\_tag\_open} = a$$

$$\text{last\_tag\_open} = f.$$

over g

$$\text{parent}_g = \text{last} = f.$$

$$\text{last} = g.$$

function g.

$$\text{last} = \text{parent} = f.$$

over h

$$\text{parent}_h = \text{last} = f$$

$$\text{last} = h$$

function h

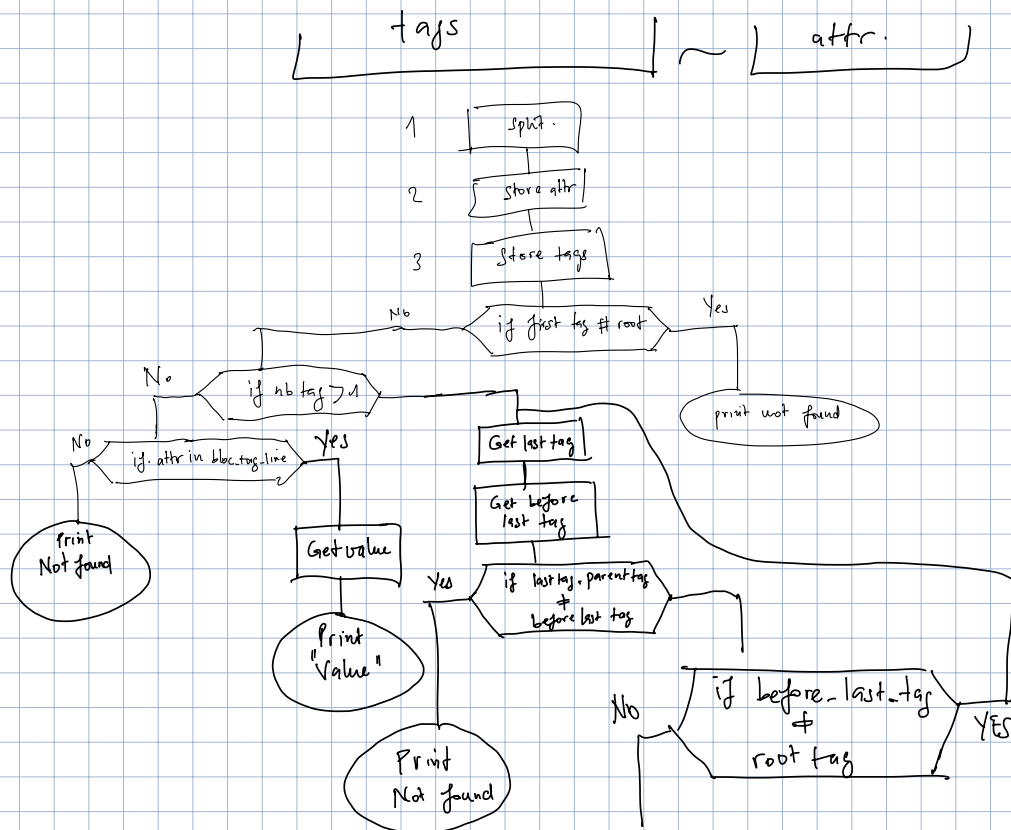
$$\text{last} = \text{parent}_h = f.$$

function f

$$\text{last} = \text{parent}_f = a$$

	tag	parent	line	last-tag = None. current = </a
0	a	None	<a value .....	
1	b	a	<b value	

2	c	a	< c heigh
3	d	c	< d size
4	e	d	< e strength



	tag	Parent	line
0	a	None	< a value .....
1	b	a	< b value
2	c	a	< c heigh
3	d	c	< d size
4	e	d	< e strength

tag-string = a.d.e

"." in a.d.e  $\neq$  -1

direct\_tag = e

$\langle \text{tag} \rightarrow \text{at1} = \text{" val " } \rightarrow \text{at2} = \text{" oak " } \rangle$

1 pos = 2  
redu = at1 = " val "  $\rightarrow$  at2 = " oak "  $\rangle$   
pos = 1  
loc = at1  
redu = val "  $\rightarrow$  at2 = " oak "  $\rangle$   
value = val 1.  
if loc = at1  
break.

2 pos = 2.  
reduce = at2

Study performance evaluation in programming languages:

- metric: CPU usage, elapsed time, memory usage, algorithmic complexity, ....

Debugging: SW: GDB

HW: Segger-J-Link, Lauterbach PowerDebug System