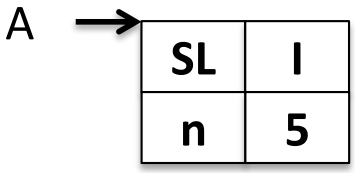
Ambiente
Run-time & Run-time Simulation

Un esempio

```
let  n = 5;;
let h = fun x -> n + x ;;
let rec f g n = if n = 1 then g(n) else n * f g (n-1);;
f h 2;;
```

Run-time Stack

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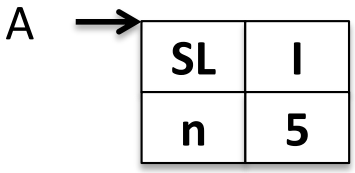
Run-time Stack: simulation



Env_A(n) = 5
Env_A(m) = unbond
for all m != n

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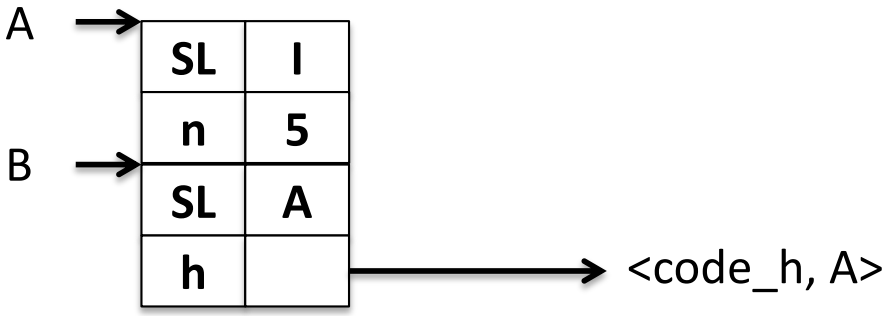


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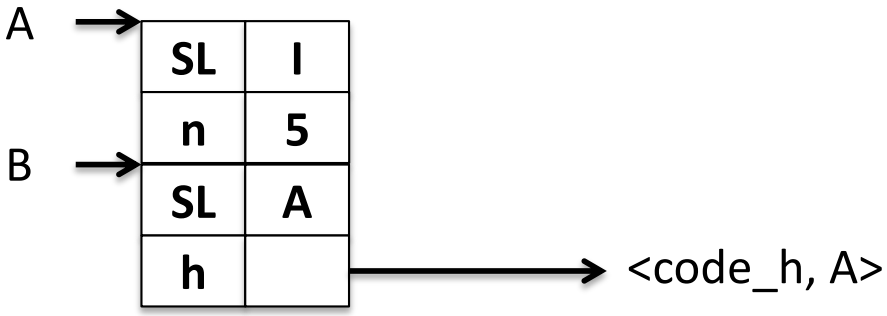

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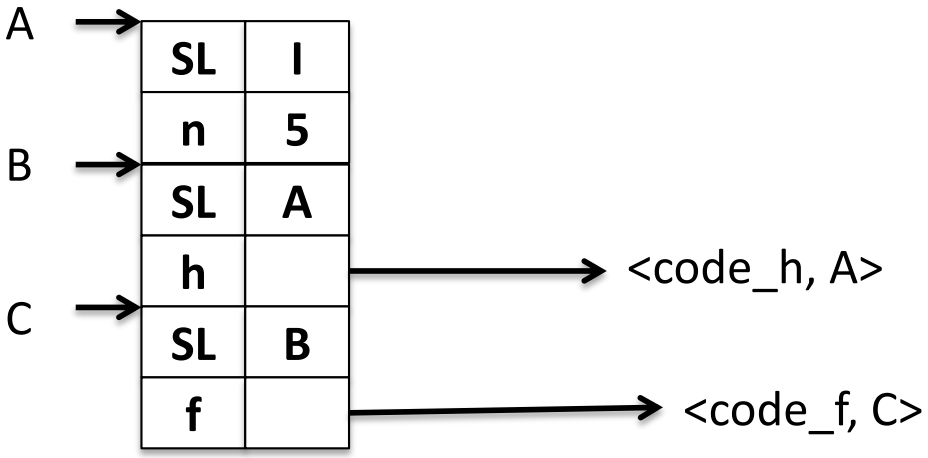


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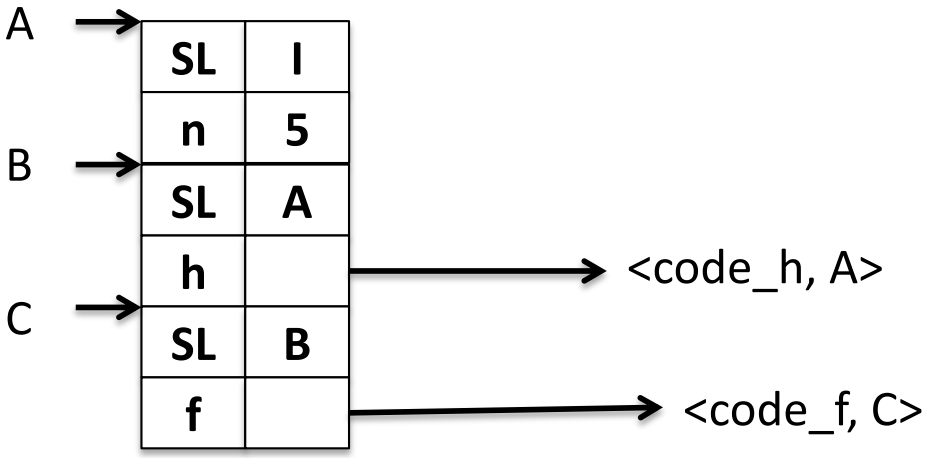

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Env_C(f) = <code_f, Env_C>
Env_C(h) = <code_h, Env_A>
Env_C(n) = 5

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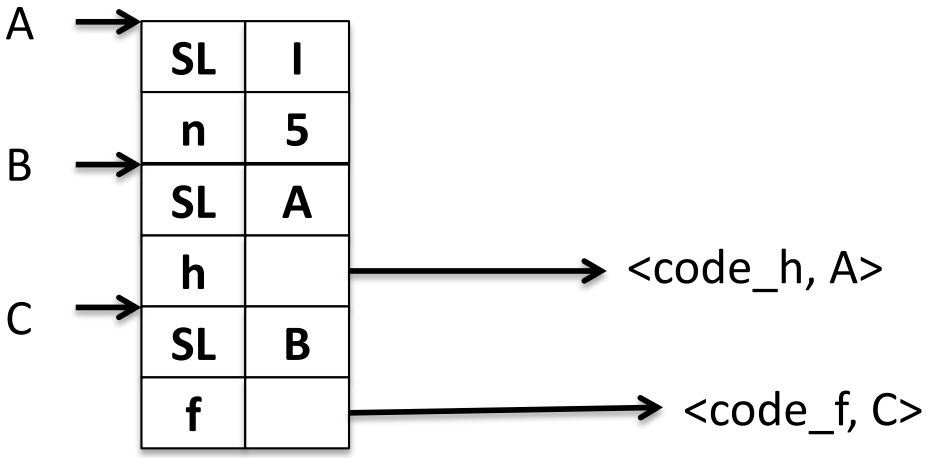

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Definizione ricorsiva:

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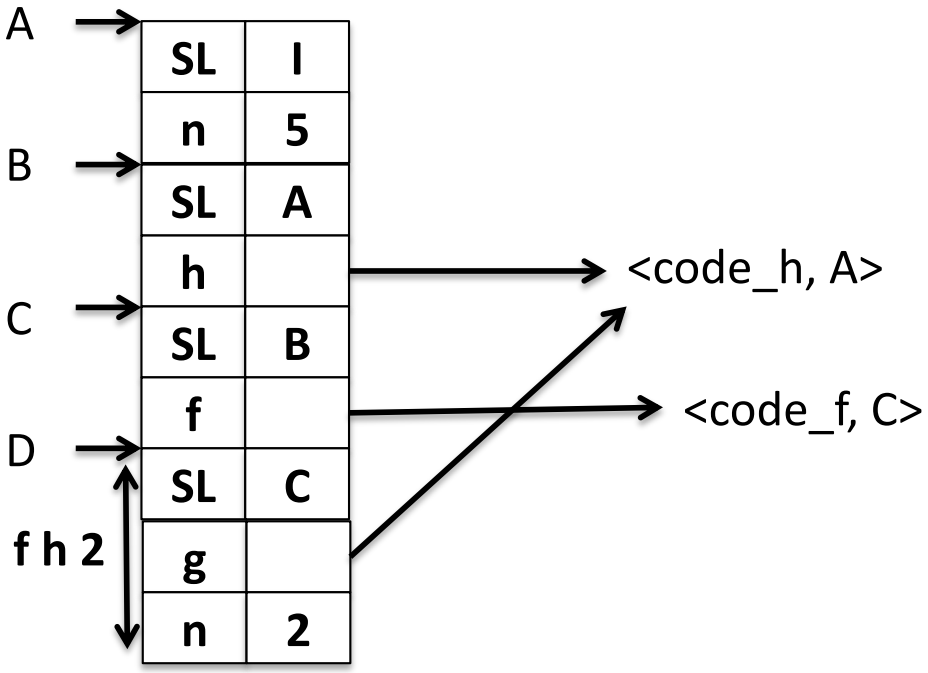
Run-time Stack

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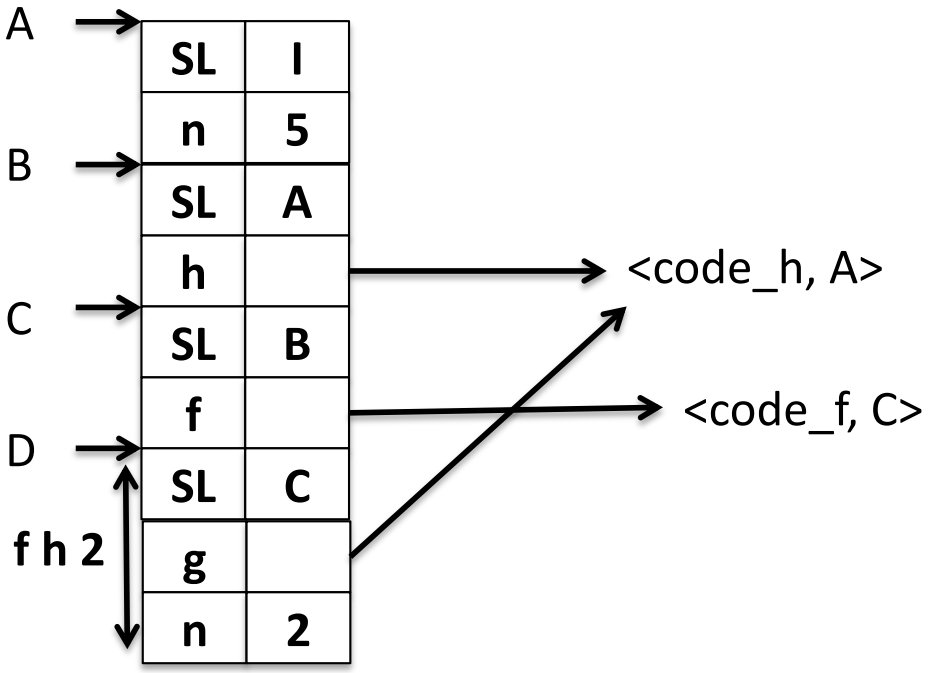

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Env_C(f) = <code_f, Env_C>
Env_C(h) <code_h, Env_A>
Env_C(n) = 5

Env_D(g) = <code_h, Env_A>
Env_D(n) = 2
Env_D(f) = <code_f, Env_C>
Env_D(h) <code_h, Env_A>

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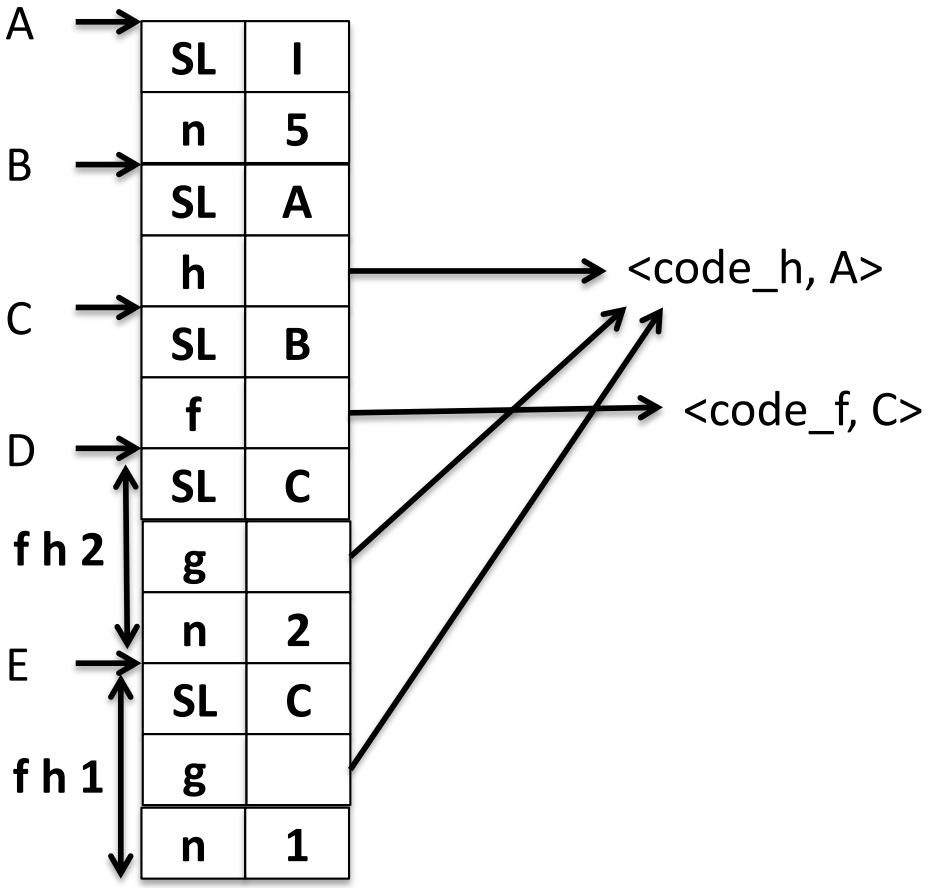


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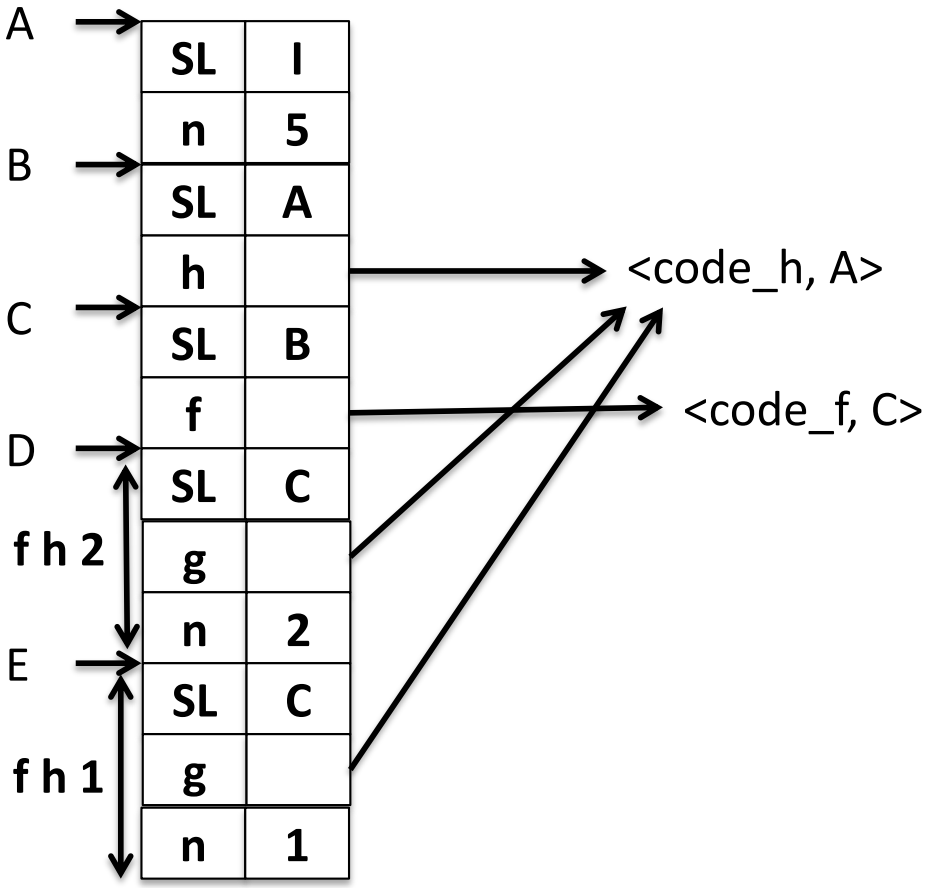


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Env_C(n) = 5

Env_D(g) = <code_h, Env_A>
Env_D(n) = 2
Env_D(f) = <code_f, Env_C>
Env_D(h) <code_h, Env_A>

Env_E(g) = <code_h, Env_A>
Env_E(n) = 1
Env_E(f) = <code_f, Env_C>
Env_E(h) <code_h, Env_A>