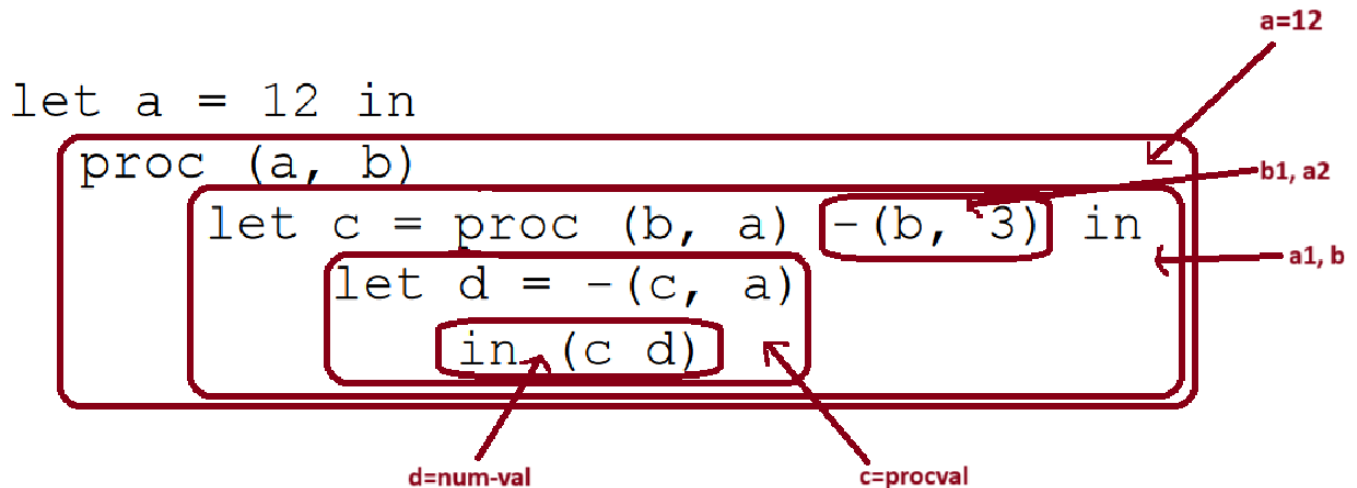


# Problem 1

## Part A



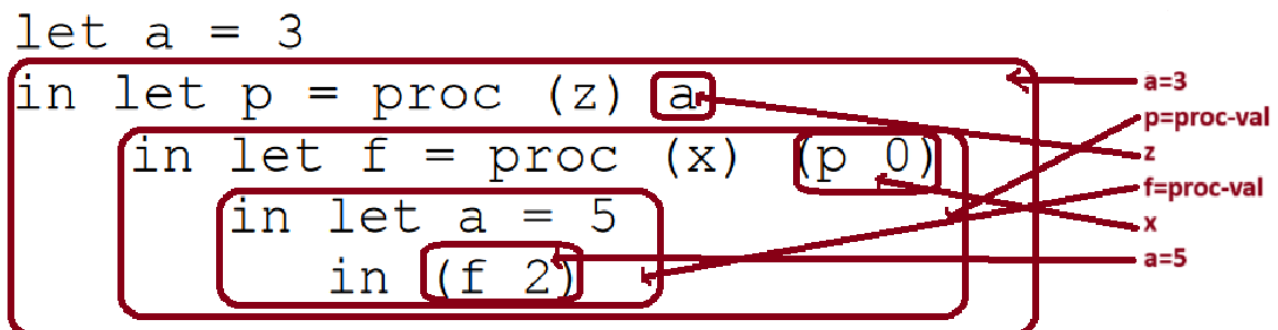
### Declarations:

- `let a = 12`
- `proc(a, b)`: `a1` and `b`
- `let c = proc-val`
- `proc(b, a)`: `b1` and `a2`
- `let d = num-val`

### References:

- `let d = -(c, a)`: references `c` and `a` from outer scopes
- `(c d)`: references `c` and `d` from outer scopes

## Part B



### Declarations:

- let a = 3
- let p = proc-val
- proc (z): z
- let f = proc-val
- proc (x): x
- let a = 5

### References:

- (f 2): references f from outer scope

---

## Problem 2

### Part A

```
%let %nameless-var 6 in
  %let %nameless-var 4 in
    %let %nameless-var -(#0, #1)
      %let #0 -(#1, #2)
        %let %nameless-var %lexproc %lexproc %lexproc -
          (#0, -(#1, #2)) in
            (((#3 #0)#1)#2)
```

### Part B

```
let a = 13 in
  let b = 7 in
    let c = 12 in
      let f = proc (b ,c) -(b, c) in
        let d = 5 in
          -(a, -(d, f))
```

## Problem 3