

Running Example for Questions 1–3

Consider the following small interpreter from class (with space included for you to build on it).

```
(define-type ArithC
  ;; Here is the new variant to handle absolute values.
  [absC (body : ArithC)]
  [numC (n : number)]
  [plusC (l : ArithC) (r : ArithC)]
  [multC (l : ArithC) (r : ArithC)])

(define (interp [ast : ArithC]) : number
  (type-case ArithC ast
    [absC (body) ...] ;; not yet complete
    [numC (n) n]
    [plusC (l r) (+ (interp l) (interp r))]
    [multC (l r) (* (interp l) (interp r))]))
```

We would like to add an absolute value operator to the language.