

```
;; empty-sto  :: Store
;; extend-sto :: Loc Value Store -> Store
;; lookup-sto :: Loc Store -> Value

;; Implementation of the ADT

;; <sto> ::= mtSto
;;         | (aSto <loc> <value> <sto>)
(deftype Store
  (mtSto)
  (aSto loc val sto))

(define empty-sto (mtSto))

(define extend-sto aSto)

(define (lookup-sto x sto)
  (match sto
    [(mtSto) (error 'lookup-sto "No value at location ~a" x)]
    [(aSto loc val rest) (if (equal? loc x)
                              val
                              (lookup-sto x rest))]))
```