

```
1: #!/afs/cats.ucsc.edu/courses/cmps112-wm/usr/racket/bin/mzscheme -qr
2: ;; $Id: listhash.scm,v 1.2 2014-10-31 17:35:08-07 - - $
3:
4: ;;
5: ;; NAME
6: ;; listhash - put some entries in a list into a hash table
7: ;;
8:
9: (define *hash* (make-hash))
10:
11: (define *list*
12:   '( (label (foo bar))
13:     ( (line 2))
14:     (sec (sec line))
15:     ( (line 4))
16:     (last (label))
17:     ( (end))))
18:
19: (define (show label item)
20:   (newline)
21:   (display label) (display " = ") (display item)
22:   (newline))
23:
24: (define (put-in-hash list)
25:   (when (not (null? list))
26:     (let ((first (caar list)))
27:       (when (symbol? first)
28:         (hash-set! *hash* first list)))
29:     (put-in-hash (cdr list))))
30:
31: (show "whole list" *list*)
32:
33: (put-in-hash *list*)
34:
35: (hash-for-each *hash*
36:   (lambda (key value) (show key value)))
```

```
1:
2: whole list = ((label (foo bar)) ((line 2)) (sec (sec line)) ((line 4)) (
last (label)) ((end)))
3:
4: sec = ((sec (sec line)) ((line 4)) (last (label)) ((end)))
5:
6: label = ((label (foo bar)) ((line 2)) (sec (sec line)) ((line 4)) (last
(label)) ((end)))
7:
8: last = ((last (label)) ((end)))
```