





```
(define-struct person (name age))
```

```
;; Person is (make-person String Natural)
```

```
;; ListOfPerson is one of:
```

```
;; - empty
```

```
;; - (cons Person ListOfPerson)
```

```
(define-struct btree-node (k v l r))
```

```
;; BTree is one of:
```

```
;; - false
```

```
;; - (make-btree-node Integer String BTree BTree)
```

```
(define-struct ttree-node (k v l c r))
```

```
;; TTree is one of:
```

```
;; - false
```

```
;; - (make-ttree-node Integer String TTree TTree TTree)
```

```
(define-struct elt (name data subs))
```

```
;; Element is (make-elt String Integer ListOfElement)
```

```
;; ListOfElement is one of:
```

```
;; - empty
```

```
;; - (cons Element ListOfElement)
```

```
;; interp. A list of file system Elements
```

```
(define-struct terminal (label weight color))
```

```
(define-struct group (color subs))
```

```
;; Region is one of:
```

```
;; - (make-terminal String Natural Color)
```

```
;; - (make-group Color ListOfRegion)
```

```
;; ListOfRegion is one of:
```

```
;; - empty
```

```
;; - (cons Region ListOfRegion)
```

```
(define-struct terminal (label weight color))  
(define-struct group (color subs))
```

```
;; Region is one of:  
;; - (make-terminal String Natural Color)  
;; - (make-group Color ListOfRegion)
```

```
;; ListOfRegion is one of:  
;; - empty  
;; - (cons Region ListOfRegion)
```

```
(define (fn-for-region r)  
  (cond [(terminal? r)  
        (... (terminal-label r)  
              (terminal-weight r)  
              (terminal-color r))]  
        [(group? r)  
        (... (terminal-color r)  
              (fn-for-lor (group-subs r))))]))
```

```
(define (fn-for-lor lor)  
  (cond [(empty? lor) (...)]  
        [else  
         (... (fn-for-region (first lor))  
               (fn-for-lor (rest lor))))]))
```