Extra Credit 2 **Rahul Ghosh**
CSci 5511 StudentID: 5476965

Pseudo Code

```
depth = 0
X = input list
get_depth(X, depth)
    if X is empty
        print depth
    else
        if first element of X is an atom
            pop first element
            get_depth(x , depth)
        else
            depth of first element = get_depth(first_element , depth+1)
            depth of rest of the list = get_depth(rest_list , depth)}
            return max(depth of first element, depth of rest of the list)
```

Code

```
(defun maxdepth(x)
        (if (null x)
                0
                (get_depth x 1)
        )
)

(defun get_depth (x depth)
        (if (null x)
                depth
                (if (listp (car x))
                        (max (get_depth (car x) (+ depth 1))
                             (get_depth (cdr x) depth)
                         )
                        (get_depth (cdr x) depth)
                )
        )
)
```

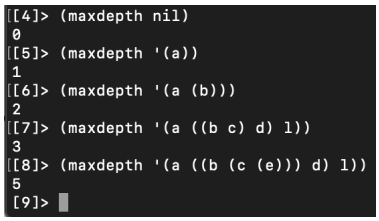

Figure 1: Various Loss functions upper bounding the 0-1 Loss function