

---

## Depth of a list

X62244\_en

---

The depth of a list  $t$  is the maximum number of nestings of lists that it contains. For example, the depth of  $[a, b, c]$  is 1, the depth of  $[a, [b, c], d]$  is 2, and the depth of  $[[[a]]]$  is 3. The depth of  $[]$  is defined to be 0.

Write a program that prints the depth of every given list.

Define and use a recursive function

$depth(t)$

that returns the depth of a list  $t$ .

### Hint

Using the *ast* package, you can extract the list  $t$  encoded in a string  $s$  with  $t = ast.literal\_eval(s)$ .

### Input

The input consists of several lists.

### Output

Print the depth of every given list.

### Sample input

```
[]  
['a', 'b', 'c']  
['a', ['b', 'c'], 'd']  
[[['a']]
```

### Sample output

```
0  
1  
2  
3
```

### Problem information

Author : Gabriel Valiente

Generation : 2019-10-27 09:43:50

© Jutge.org, 2006–2019.

<https://jutge.org>