Reduction in MapReduce

What does `(reduce-arbitrarily list '(0 1 2 3 4 5))` do?

Two neighboring values are chosen on a first-come, first-serve basis.

`(((0 1) (2 3)) (4 5))`
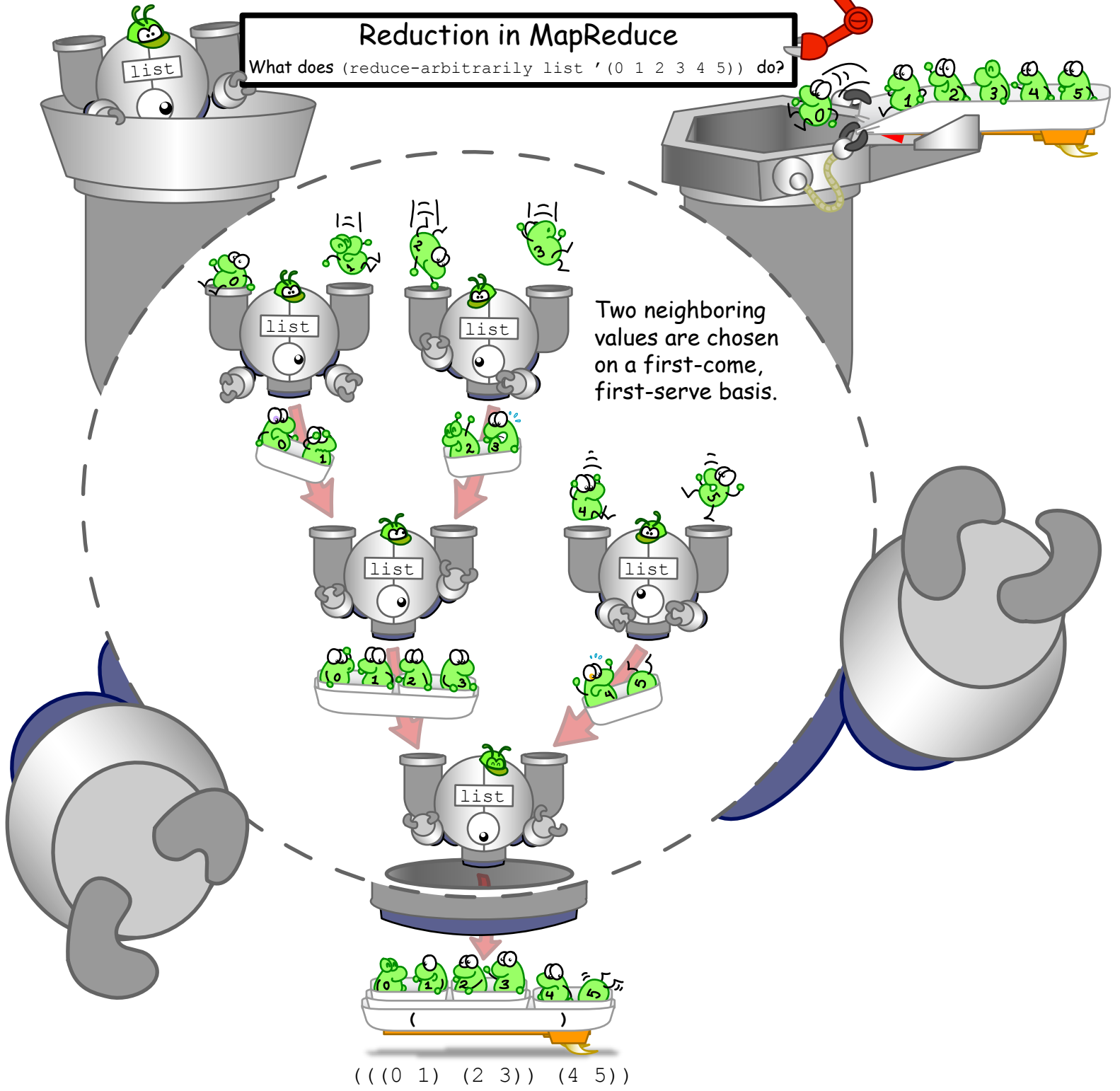
Depending on the order in which values are chosen, the same function call can give different results.

`(0 (1 ((2 3) (4 5))))`

`((0 ((1 (2 3)) 4)) 5)`
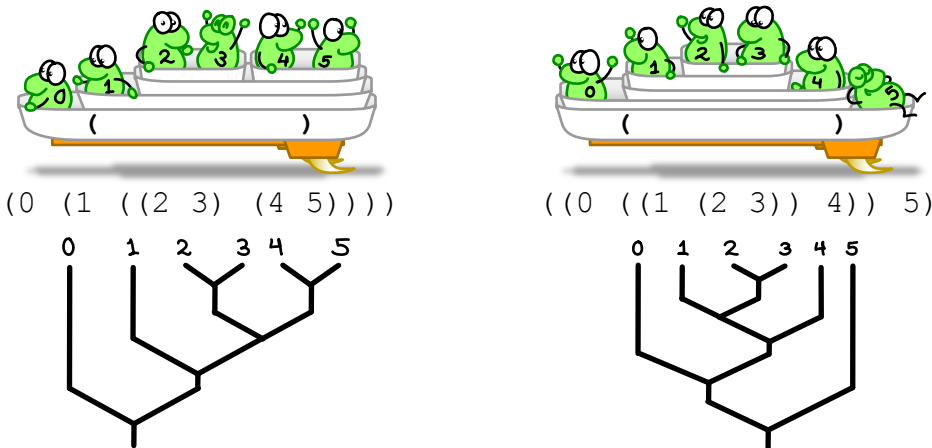
However, if you use an associative reducer, such as + or *, the result will always be the same!