

- 1) The function reverses the order of the list. Every function has a return value. The value returned is the last value that appears in the function. There is no return statement. The mystery function reverses the given list, without modifying the innermost lists (if applicable).

Logic explanation:

(mystery '(1 2 3))

(append (mystery '(2 3)) (list 1))

(append (mystery '(3)) (list 2)(list 1)) (append (mystery '()) (list 3)(list 2)(list 1)) (append (list 3) (list 2) (list 1))

'append function concatenates given list -> (3 2 1)

- 2) The entire function is recursive, the outline of the code allows the program to return the numbers backward. Once the base case is met, the L value is returned.
- 3) The **'begin'** form is utilized because iff allows for one expression in each branch. Begin takes an arbitrary number of expressions and executes each one of them but only returns the result of the last expression in the body. The begin form (not just a function) evaluates its subexpressions, and returns the value of the last one.

**'displayln'** causes a value to be displayed. In this it will display the elements in L in whatever case is passed to the function.