list1 <- ['a', 'b'] 1

list1 <- ['x', 'y', 'z'] 1

CARTESIAN\_PRODUCT(l1, l2)

newList <- Emptry String Array [] 1

If l1.length < l2.length Then 1

For a <- 0 to l2.length-1 n

For b <- 0 to l2.length n\*n

Append l1[a] + l2[b] to newList n\*n

Else

For a <- 0 to l1.length-1 n

For b <- 0 to l1.length n\*n

Append l2[a] + l1[b] to newList n\*n

Return newList 1

PRINT CARTESIAN\_PRODUCT(list1, list2) 1

**Runtime analysis:** f(n) = 4n2­­ + 2n + 6

**Complexity:** O(n2)