	s/e	freq $n\le1$	freq $n>1$	total $n\le1$	total $n>1$
Algorithm func2(n)	0	–	–	–	–
{	0	–	–	–	–
if (n==0 or n==1)	1	1	0	1	0
return 1	1	1	0	1	0
return (n * func2(n-1))	$1+x$	0	1	0	$1+x$
}	0	0 –	0 –	–	–
Algorithm func1(n)	0	–	–	–	–
{	0	–	–	–	–
for i=1 to n	1	1	$n+1$	1	$n+1$
print (func2(i))	$1+x$	1	n	$(1+x)$	$n(1+x)$
}					

$$x = t_{func2}(n-1)$$

$$t_{func2}(n) = 2 \quad \text{if } n \le 1 \quad — (1)$$

$$= 1 + x \quad n > 1 \quad — (2)$$

$$t_{func2}(n) = 1 + t_{func2}(n-1)$$

$$= 1 + 1 + t_{func2}(n-2)$$

$$= 1 + 1 + 1 + \dots t_{func2}(n-3)$$

$$= 1(a) + t_{func2}(n-a).$$

let $a = n$.

$$= n + t_{func2}(0).$$

$$\boxed{t_{func2}(n) = n+2}$$

$\therefore\ x = t_{func2}(n-1) = n-1+2 = \underline{\underline{n+1}}$

$$t_{func1} = 1 + x \qquad \text{if } n \leq 1$$

$$= 1 + n + 1$$

$$= 2 + n$$

$$\cancel{\text{if } n \geq 1}$$

$$\text{if } n > 1$$

$$t = n(1 + x)$$

$$= n(1 + n + 1)$$

$$= n(n + 2)$$

$$= n^2 + 2n$$

$$\therefore \; t_{func1}(n) = \Theta(n^2)$$