

i	1	2	3	4	5	6	7	8	9	10	11
S	a	a	b	c	a	a	b	x	a	a	z
Z _i	-	1	0	0	3	1	0	0	2	1	0

i	1	2	3	4	5	6	7	8	9	10
S	a	b	a	b	c	a	b	a	b	a
Z _i	-	0	2	0	0	4	0	3	0	1

FOR $i \leftarrow 2$ TO $|S|$ DO

$j \leftarrow 0$

WHILE $S(j+1) = S(i+j)$ AND $i+j < |S|$ DO

$j \leftarrow j+1$

END WHILE

$Z_i \leftarrow j$

END FOR

$$27n^2 + 3n + 29 = O(n^2) \quad \checkmark$$

$$15n + 3 = O(n) \quad \checkmark$$

$$15n + 3 = O(n^3) \quad \checkmark$$

$$15n^2 + 100 = O(n) \quad \text{NEIN!}$$

$$23 \log n = O(\log n) \quad \checkmark$$

$$\log n = O(n) \quad \checkmark$$

$$(n+1)(n+2)(n+3) = O(n^2) \quad \text{NEIN!}$$

$$n^3 + 6n^2 + 11n + 6 = O(n^3) \quad \checkmark$$

$$n^2 + 10000n = O(n) \quad \text{NEIN!}$$

$$n^2 + 10000n = O(n^2) \quad \checkmark$$

$$n^2 + 10000n = O(n^7) \quad \checkmark$$