
Algorithm 1: ders2forSEQ(r_1, r_2, s)

Result: rexpCompute list $l_1 : [r_1 \setminus c_1 \cdots c_n, r_1 \setminus c_1 \cdots c_{n-1}, \dots, r_1 \setminus c_1, r_1]$;Compute list $l_2 : [r_2, r_2 \setminus c_n, r_2 \setminus c_{n-1} c_n, \dots, r_2 \setminus c_1 \cdots c_n]$;Compute list $l_3: l_3 \leftarrow []$;**for** $i \leftarrow 1$ **to** n **do**| *if* nullable($r_1 \setminus c_1 \cdots c_{n-i+1}$) *then add* i *to* l_3 **end** $result \leftarrow r_1 \setminus c_1 \cdots c_n \cdot r_2$ **for** $i \leftarrow 0$ **to** $l_3.length - 1$ **do**| $result \leftarrow ALT(result, l_2[l_3[i]])$ **end****return** result
