

NTIN066 - solutions 9

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1. Simulate building of the suffix array, rank array, and LCP array on the string “CATCANCONCATENATE”.

i	$\alpha[i]$	$S_1[i]$	$R_1[i]$	$S_2[i]$	$R_2[i]$	$S_4[i]$	$R_4[i]$	$L[i]$	suffix
0	C	17	5	17	5	17	6	0	ϵ
1	A	1	1	4	2	4	2	1	ANCONCATENATE
2	T	4	15	1	15	1	15	2	ATCANCONCATENATE
3	C	10	5	10	5	14	5	3	ATE
4	A	14	1	14	1	10	1	0	ATENATE
5	N	0	11	0	13	3	13	2	CANCONCATENATE
6	C	3	5	3	8	0	8	3	CATCANCONCATENATE
7	O	6	14	6	14	9	14	1	CATENATE
8	N	9	11	6	12	6	12	0	CONCATENATE
9	C	12	5	16	5	16	7	1	E
10	A	16	1	12	2	12	4	0	ENATE
11	T	5	15	13	16	13	17	0	NATE
12	E	8	9	5	10	8	10	2	NCATENATE
13	N	13	11	8	11	5	11	0	NCONCATENATE
14	A	7	1	7	2	7	3	0	ONCATENATE
15	T	2	15	2	16	2	16	1	TCANCONCATENATE
16	E	11	9	11	9	15	9	2	TE
17	ϵ	15	0	15	0	11	0	-	TENATE