

Untitled

O. Denas

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Let $t = \text{abbaba}$ and $s = \text{ab}$.

We have

i	t_i	MS	ms	runs	h
0	a	2	2 001	NaN	1
1	b	1	0 1	1	
2	b	1	1 01	0	3
3	a	2	2 001	0	4
4	b	1	0 1	1	
5	a	1	1 01	0	6

and

i	s_i	SA_s	BWT_s	ss_i	SA_ss	BWT_ss
0	a	2 #	b	b	2 #	a
1	b	0 ab#	#	a	1 a#	#
2	#	1 b#	a	#	0 ba#	b

Algorithm I

[5] $w = a(1, 1) \rightarrow ba(-, -) \quad p(w) = e(0, 2) \rightarrow b(2, 2)$

[4] $w = b(2, 2) \rightarrow ab(1, 1) \quad \text{runs}[4] = 1$

[3] $w = ab(1, 1) \rightarrow bab(-, -) \quad p(w) = e(0, 2) \rightarrow b(2, 2)$

[2] $w = b(2, 2) \rightarrow bb(-, -) \quad p(w) = e(0, 2) \rightarrow b(2, 2)$

[1] $w = b(2, 2) \rightarrow ab(1, 1) \quad \text{runs}[1] = 1$

Algorithm II

[0] $w = a(1, 1) \rightarrow ba(2, 2) \rightarrow bba(-, -) \quad h^* = 2 \quad p(ba) = e(0, 2)$
 $e(0, 2) \rightarrow b(2, 2) \quad k' = 2 \quad h^* - k - MS[0] + 1 = 2 \rightarrow 001$

[2] $w = b(2, 2) \rightarrow ab(-, -) \quad h^* = 3 \quad p(b) = e(0, 2)$
 $e(0, 2) \rightarrow b(2, 2) \quad k' = 3 \quad h^* - k - MS[0] + 1 = 1 \rightarrow 01$

[3] $w = a(1, 1) \rightarrow ba(2, 2) \rightarrow aba(-, -) \quad h^* = 5 \quad p(ba) = e(0, 2)$
 $e(0, 2) \rightarrow a(1, 1) \quad k' = 5 \quad h^* - k - MS[0] + 1 = 2 \rightarrow 001$

Scratch notes

