

ab	a	aabbb	aab	ba	abab	aa
ba		abb	baab	baa	ababaa	а

abab	aaabbb	aab	ba	ab	ab	aa
ababaa	abb	baab	baa	ba	ba	а

abab	aaabb	b	aab	ba	ab	ab	aa
ababaa	bb		baab	baa	ba	ba	a

abab	aaabbb	aab	ba	ab	ab	aa	
ababaa	bb	baab	baa	ba	ba	a	

a	baa
ab	aab

then f(I) would be the PCP instance

a*	b*a*a*	*a*	\$
*a*b	*a*a*b	*a*b*	*\$

start	1	#
start 1	1	#

i		i
1 <i>i</i> + 1	#	<i>i</i> + 1

i	i
i+k	<i>i</i> − <i>k</i>

i	i 1	i #
<i>i</i> + 1	<i>i</i> + 2	<i>i</i> + 3

start	1	#	2 halt	1
start 1	1	#	halt	1 2

start	1	#	3 halt	1	2
start 1	1	#	halt	1 2	# 3

 $1\#\#|1\#^5|1^3\#^3|1^2\#^4|1^3\#^4$

asdf

			1	
start	1	#	7 halt	
start 1	1	#	halt	
1	2			
	_			
1 2	# 3	}		
	2 1		2 4	
3	3 1		3 #	
4	5		6	
T				
4	5		6	
7	3		3	

start		1	1		2	1	#
start 1	1	2	1	#	3	1	#
3 1	#	5	#				
5	#	3	#				
3 #		6					
6		3					
0		3					
3		4	7 h	alt			
4		7	hal	t			

start

start 1

start	1	
start 1	1 2	

start	1
start 1	1 2

start	1	1	2
start 1	1 2	1	# 3

start	1	1	2	1	#
start 1	1 2	1	# 3	1	#

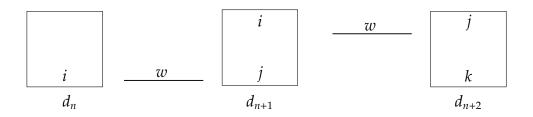
start	1		1	2		1	#	
start 1	1	2	1	#	3	1	#	
3	1	#	#	4	1	#	#	
# 4	1	#	#	3	3	#	#	
3	#	#	#					
# 4	#	#	#					
4 #	#	#	4	#	#	4	#	4 halt
4	#	#	4	Ŀ	#	4	1	halt

?	k	
 k	N + 1	
?	k	N+1 halt
 k	N + 1	halt

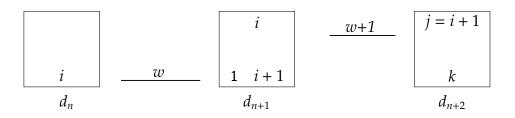
n

1 n+1

n #
n+3

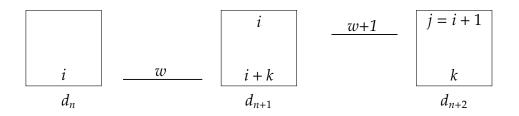


i		j	<u> </u>	k
j	<u> </u>	k		
d_{n+1}		d_{n+2}		d_{n+3}



i		<i>i</i> + 1	??	k
1 1+1	w+1	k		
d_{n+1}		d_{n+2}		d_{n+3}

i		<i>i</i> + 1	??	k
1 1+1	w+1	k		
d_{n+1}		d_{n+2}		d_{n+3}



i 1	i #
<i>i</i> + 2	<i>i</i> + 3

		i #	<u> </u>	j = i + 3
i	w	<i>i</i> + 3		k
d_n		d_{n+1}		d_{n+2}

i

i + 1

		i	w	j = i + 1
i	w	<i>i</i> + 1		k
d_n		d_{n+1}		d_{n+2}

start	1	#
start 1	1	#

i		i
1 <i>i</i> + 1	#	<i>i</i> + 1

i	i
i + k	<i>i</i> − <i>k</i>

i	$\begin{bmatrix} i & 1 \end{bmatrix}$	i #
i+1	<i>i</i> + 2	<i>i</i> + 3

start	1		1	2		1	#	
start 1	1	2	1	#	3	1	#	
3	1	#	#	4	1	#	#	
# 4	1	#	#	3	3	#	#	
3	#	#	#					
# 4	#	#	#					
4 #	#	#	4	#	#	4	#	4 halt
4	#	#	4	1	#	4	1	halt

n

1 n+1

n 1	n	#
next(n+2)	next((n+3)

	#	1	x		y
x	#	1	1 y	?	# z

	#	1	x	#	1	1	y
$\begin{array}{ c c c c } \hline & & & \\ & x & & \\ \hline \end{array}$	#	1	1 y	#	1	1	# z

	#	1	x		y #
x	#	1	1 y	?	z

	#	1	x #		y
x	#	1	y	?	1 z

