

# Datastructuren

[www.liacs.nl/~hjh/dat/](http://www.liacs.nl/~hjh/dat/)

H.J. Hoogeboom

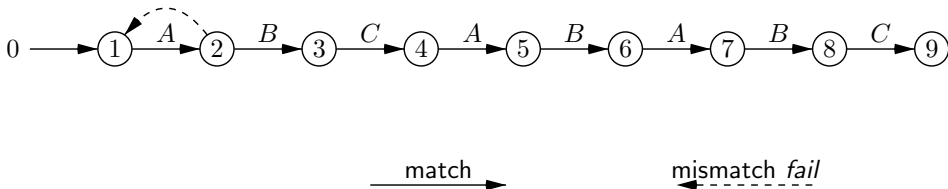
Universiteit Leiden

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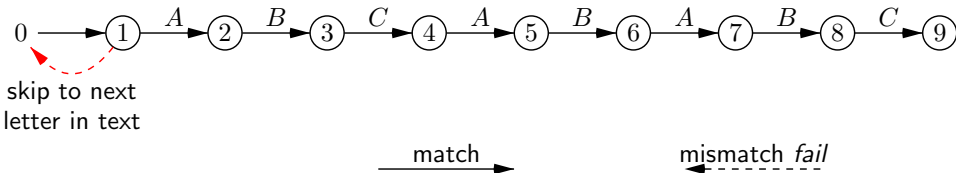
———— computing KMP failure links ————

```
Pos = 1 // position in pattern
FLink[1] = 0
for Pos = 2 to PatLen
do Fail = FLink[Pos-1]
  while ( (Fail > 0) and (P[Fail] != P[Pos-1]) )
do Fail = FLink[Fail]
  od
  FLink[Pos] = Fail+1
od
```

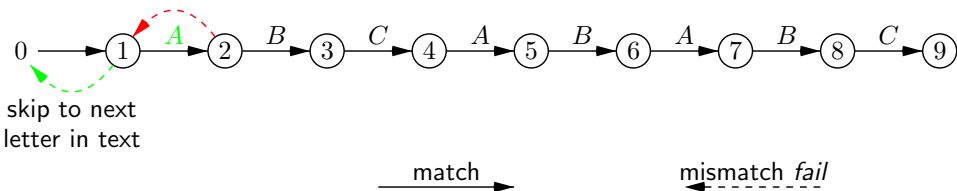
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1	1	2	3	2	3



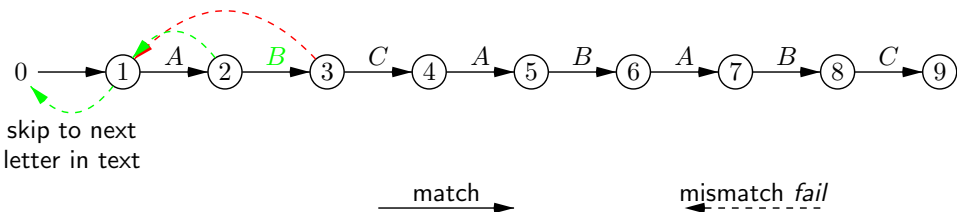
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0							



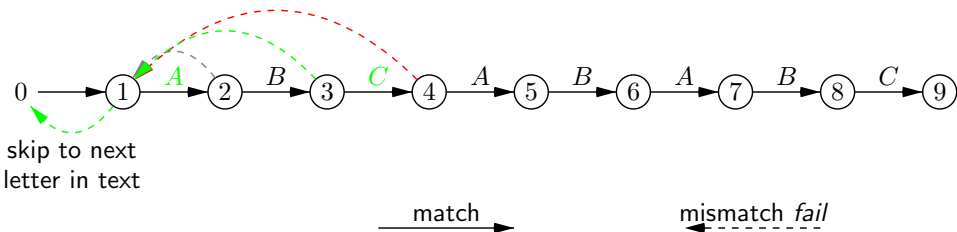
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1						
	+1							



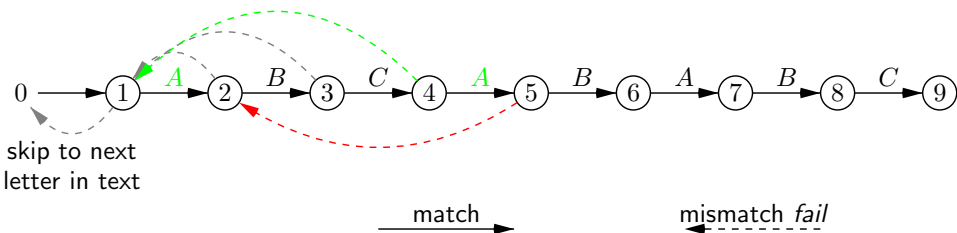
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1					
		+1						



$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1	1				
	+1							

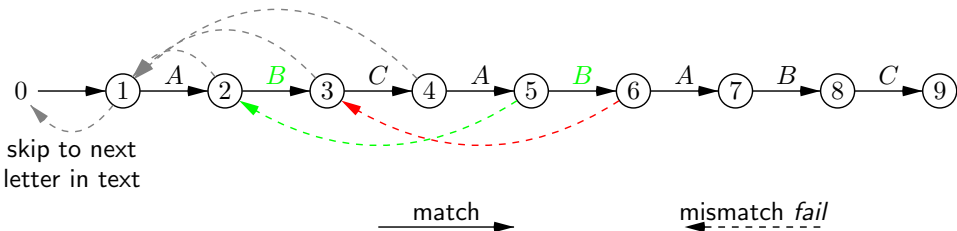


		+1						
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1	1	2			

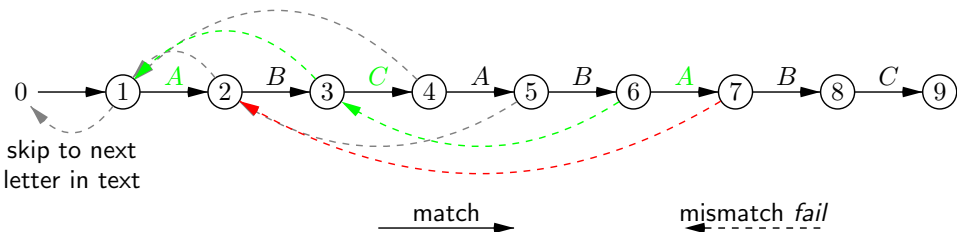




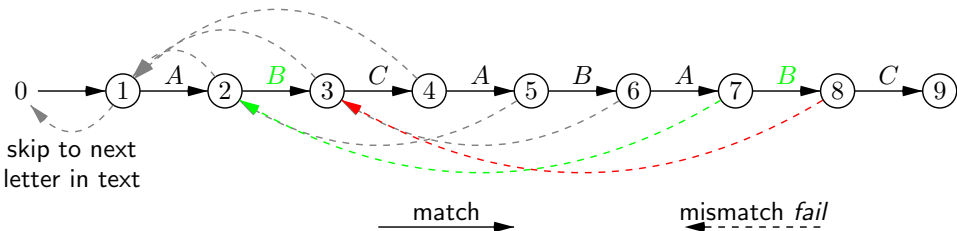
			+1					
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1	1	2	3		



		+1						
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1	2	3	2		



			+1					
$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1	1	2	3	2	3



$k$	1	2	3	4	5	6	7	8
$P[k]$	A	B	C	A	B	A	B	C
$FLink[k]$	0	1	1	1	2	3	2	3

