

$N=10$

371

A	1	2	0	1	3	2	1	5	4	2
DP	0	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX

0

A ✓	1	2	0	1	3	2	1	5	4	2
DP	0	1	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX

$i=0, A[0]=1$

$$DP[i] = \min_{\text{MAX}}(DP[i], DP[i-1] + 1)$$

$$= 1$$

1

A ✓	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	MAX	MAX	MAX	MAX	MAX	MAX

$i=1, A[1]=2$

$$DP[2] = \min(DP[2], DP[1] + 1) = 2$$

$$DP[3] = \min(DP[3], DP[1] + 1) = 2$$

2

A ✓	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	MAX	MAX	MAX	MAX	MAX	MAX

$i=2, A[2]=0, \text{전혀 X}$

3

A	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	3	MAX	MAX	MAX	MAX	MAX

$$i=3, A[3]=1$$

$$DP[4] = \min(DP[4], DP[3]+1) = 3$$

4

A	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	3	4	4	4	MAX	MAX

$$i=4, A[4]=3$$

$$DP[5] = \min(DP[5], DP[4]+1) = 4$$

$$DP[6] = \min(DP[6], DP[4]+1) = 4$$

$$DP[7] = \min(DP[7], DP[4]+1) = 4$$

5

A	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	3	4	4	4	MAX	MAX

$$i=5, A[5]=2$$

$$DP[6] = \min(\overbrace{DP[6]}^4, \overbrace{DP[5]+1}^5) = 4$$

$$DP[7] = \min(\overbrace{DP[7]}^4, \overbrace{DP[5]+1}^5) = 4$$

6

A	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	3	4	4	4	MAX	MAX

$$i=6, A[6]=1$$

$$DP[7] = \min(\overbrace{DP[7]}^4, \overbrace{DP[6]+1}^5) = 4$$

7

A	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	3	4	4	4	5	5

$i=7, A[7]=5$

$$DP[8] = \min(DP[8], DP[7]+1) = 5$$

$$DP[9] = \min(DP[9], DP[7]+1) = 5$$

$DP[10, 11, 12]$  : DP 범위 초과 : break 필요.

8

A	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	3	4	4	4	5	5

$i=8, A[8]=4$

$$DP[9] = \min(\underline{5}, \underline{6}+1) = 5$$

$DP[10, 11, 12]$  : DP 범위 초과 : break 필요

9

A	1	2	0	1	3	2	1	5	4	2
DP	0	1	2	2	3	4	4	4	5	5

$i=9, A[9]=2$

$DP[10, 11]$  : DP 범위 초과 : break 필요

$\therefore DP[-1]$  값 출력 but,  $DP[-1] == \text{MAX}$  일 시 -1 출력