

Remove k - digits

ans
→

1 | ~~4~~ | ~~5~~ | 2 | ~~2~~ | 1 | 9

k = 3

1 3 2 9

Best \Rightarrow 1 2 1 9

(M-1) \rightarrow Brute force \rightarrow

Find all combinations with 3 characters removed from string

1 4 5 2 2 1 9 N = 7

No of ways to choose 3 pos Out of 7

$${}^7C_3 = \frac{7!}{4!3!} = 35$$

Expensive

(M-2) \rightarrow

1 2 ~~3~~ 4 ~~5~~ ~~6~~ 7

~~9~~ ~~8~~ ~~7~~ 6 5 4

4
5
6
9
8
7

 \rightarrow small stack

if $\text{top}() > \text{digit}$
pop()

ex \rightarrow 1 4 8 2 2 1 9
 $\nearrow \nearrow \nearrow \nearrow$

	9	
	2	1
	4	8 2
	1	

9 1 2 1 \Rightarrow Reverse
11

1 2 1 9

ex \rightarrow 2 5 6 1 8 0 5 , $k = \cancel{4} / 1$

5 0 1
 \nearrow Reverse
 1 0 5

	6	5
	5	8 0
	2	1