

Saturday, 4 May 2019 7:58 PM

$$\hookrightarrow O(n+m)$$

① No re-computation

② Reset table

at every index we will store what is length of longest suffix present till now viz also present as a prefix in the pattern.

✓

0	1	2	3	4	5	6
-	0	0	0	0	1	2
A	B	C	X	A	B	X

→ Reset Table

Last index of the prefix matched with a suffix

```
while(j>0 and  
    str[i] != pat[j]){  
    j = reset[j].
```

int, j++

→

0	1	2	3	4	5	6	7	8	9	10
-1	0	0	1	1	2	3	2	0	1	2
a	b	a	a	b	a	b	b	a	b	a

 → result table