

Longest String Chain

s = {

```
words[]: [ "a", "b", "ba", "bca", "bda", "bdca" ]
```



LSC?

\emptyset
a ba bda bdca
| | |
LSC

why?

\rightarrow "a" + "b" \rightarrow then it is considered in a chain.
append

For prev word + new char \rightarrow includes
char

Let compare it with LIS?

\rightarrow In LIS \rightarrow we check if my prev
element is smaller than current.

1 4 3 7 8

1 < 4 < 7 < 8

1 4 7 8 \rightarrow LIS
 \uparrow

So, I can say Longest String Subsequence.

↓
What does string

mean that

we compare current
with prev string.

↙
What does to compare mean

Comparing a String means \rightarrow all the char. of
prev should be those
and a additional one
char.

and its size should be 1 greater.

Pseudocode:

for ($i = 1, i < n; i++$)

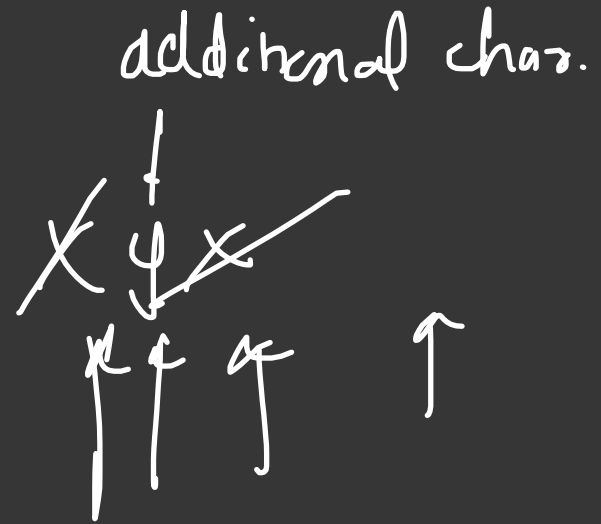
for ($j = 0, j < i; j++$)

if (^{compare} ~~are~~ ($s[i], s[j]$))

$dp[i] = \max(dp[i], 1 + dp[j])$

$maxi = \max(maxi, dp[i]);$

Compare function:



True