

### Is Subsequence

Input  $\rightarrow s = \underline{a} \underline{b} \underline{c}$   
 $t = \underline{a} \underline{b} \underline{g} \underline{d} \underline{c}$

Output  $\rightarrow$  True

Input -  $S = \underline{a} \underline{x} \underline{c}$   
 $T = a h b g d c$

Out put  $\rightarrow$  false

## Steps

1. We can use Two pointers Approach here

$s \rightarrow$       a   b   c  
                   ↑            ↑  
 pointers       $p = 0$

$$x = a h b g d c$$

$$q = 0$$

Condition  $\rightarrow$  1) if  $(s.\text{charAt}(p) == t.\text{charAt}(q))$

~~logit  $\leq \Gamma_0$  load  $\rightarrow p^{++}, q^{++}$~~ 

2) else  $\rightarrow q_{++}$

→ Run this under while loop such that  
while (p < s.length() && q < t.length())

↑ Once while loop exits

2. If still  $S$  is left uncovered that means not a subsequence.

if ( $p < s.length()$ )

↳ return false

3. Return True for all other cases.