

424 - Longest Repeating Character Replacement

$s = "AABBB"$, $k = 2$

A A B B B $k = 2$
L

R $\text{longest} = 1 \cancel{2} \cancel{3} 4 5$

most freq = ~~A B~~

A : ~~1/2~~

B : ~~1/2 3~~

$s = "CDABABE"$, $k = 2$

C D A B A E $k = 2$
L

R $\text{longest} = 1 \cancel{2} \cancel{3} 4$

most freq = ~~C D A B A~~

C : ~~1/0~~

D : ~~1/0~~

A : ~~1/2~~

B : 1

E : 1

Track frequencies of characters in the substring to determine the max. occurring character i.e. the one we don't replace.

replacements = length of substring - # occurrences of max. occurring character
must be $\leq k$ for a valid window