A teacher is writing a test with n true/false questions, with 'T' denoting true and 'F' denoting false. He wants to confuse the students by **maximizing** the number of **consecutive** questions with the **same** answer (multiple trues or multiple falses in a row).

You are given a string answerKey, where answerKey[i] is the original answer to the ith question. In addition, you are given an integer k, the maximum number of times you may perform the following operation:

* Change the answer key for any question to 'T' or 'F' (i.e., set answerKey[i] to 'T' or 'F').

Return *the****maximum****number of consecutive* 'T's or 'F's *in the answer key after performing the operation at most* k *times*.

**Example 1:**

**Input:** answerKey = "TTFF", k = 2

**Output:** 4

**Explanation:** We can replace both the 'F's with 'T's to make answerKey = "TTTT".

There are four consecutive 'T's.

**Example 2:**

**Input:** answerKey = "TFFT", k = 1

**Output:** 3

**Explanation:** We can replace the first 'T' with an 'F' to make answerKey = "FFFT".

Alternatively, we can replace the second 'T' with an 'F' to make answerKey = "TFFF".

In both cases, there are three consecutive 'F's.

**Example 3:**

**Input:** answerKey = "TTFTTFTT", k = 1

**Output:** 5

**Explanation:** We can replace the first 'F' to make answerKey = "TTTTTFTT"

Alternatively, we can replace the second 'F' to make answerKey = "TTFTTTTT".

In both cases, there are five consecutive 'T's.

**Constraints:**

* n == answerKey.length
* 1 <= n <= 5 \* 104
* answerKey[i] is either 'T' or 'F'
* 1 <= k <= n