You are given a binary string s and a positive integer k.

Return *the length of the****longest****subsequence of*s*that makes up a****binary****number less than or equal to* k.

Note:

* The subsequence can contain **leading zeroes**.
* The empty string is considered to be equal to 0.
* A **subsequence** is a string that can be derived from another string by deleting some or no characters without changing the order of the remaining characters.

**Example 1:**

**Input:** s = "1001010", k = 5

**Output:** 5

**Explanation:** The longest subsequence of s that makes up a binary number less than or equal to 5 is "00010", as this number is equal to 2 in decimal.

Note that "00100" and "00101" are also possible, which are equal to 4 and 5 in decimal, respectively.

The length of this subsequence is 5, so 5 is returned.

**Example 2:**

**Input:** s = "00101001", k = 1

**Output:** 6

**Explanation:** "000001" is the longest subsequence of s that makes up a binary number less than or equal to 1, as this number is equal to 1 in decimal.

The length of this subsequence is 6, so 6 is returned.

**Constraints:**

* 1 <= s.length <= 1000
* s[i] is either '0' or '1'.
* 1 <= k <= 109