Typosquatting is a hack that relies on mistakes made by Internet users when inputting a website address into a web browser. So if a user is trying to go to `godaddy.com` but they accidentally type in `goddady.com` and someone else owns that domain, they could pretend to be GoDaddy and steal valuable user information.

Assume that GoDaddy is introducing a new feature that helps users protect their domains from typosquatting. It is known that a typosquatter's URL is usually similar to the victim's domain, but has some *typos* in it, where a *typo* means that letters in two adjacent positions have been swapped.

Given `n`, the number of additional domains the owner is willing to buy to protect their domain against typosquatting, GoDaddy calculates the maximum number `k` such that all of the domains with `k` or fewer *typos* can be bought (excluding the original domain itself).

Your task is to implement an algorithm that finds `k` given `n` and a domain name.

Example

- For `n = 7` and `domain = "godaddy.com"`, the output should be `typosquatting(n, domain) = 1`.

  For `k = 1` the following *typos* can be made:

```
"ogdaddy.com"
"gdoaddy.com"
"goadddy.com"
"goddady.com"
"godadyd.com"
"godaddy.ocm"
"godaddy.cmo"
```

`7` domains to buy altogether. That's exactly the number of domains the user can afford, so the answer is `1`.

- For `n = 9` and `domain = "omg.tv"`, the output should be `typosquatting(n, domain) = 2`.
  - For `k = 1`, the following *typos* can be made:

```
"mog.tv"
```

GIVE UP