

Regular Expression Matching - LeetCode

 leetcode.com/problems/regular-expression-matching

Given an input string (`s`) and a pattern (`p`), implement regular expression matching with support for `.` and `*`.

`.` Matches any single character.

`*` Matches zero or more of the preceding element.

The matching should cover the **entire** input string (not partial).

Note:

- `s` could be empty and contains only lowercase letters `a-z`.
- `p` could be empty and contains only lowercase letters `a-z`, and characters like `.` or `*`.

Example 1:

Input:

`s = "aa"`

`p = "a"`

Output: false

Explanation: "a" does not match the entire string "aa".

Example 2:

Input:

`s = "aa"`

`p = "a*"`

Output: true

Explanation: `*` means zero or more of the preceding element, 'a'. Therefore, by repeating 'a' once, it becomes "aa".

Example 3:

Input:

`s = "ab"`

`p = ".*"`

Output: true

Explanation: `.*` means "zero or more (*) of any character (.)".

Example 4:

Input:

`s = "aab"`

`p = "c*a*b"`

Output: true

Explanation: c can be repeated 0 times, a can be repeated 1 time. Therefore, it matches "aab".

Example 5:

Input:

s = "mississippi"

p = "mis*is*p*."

Output: false

