LeetCode

Day-16 Q-02: 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