

Given two strings `needle` and `haystack`, return the index of the first occurrence of `needle` in `haystack`, or `-1` if `needle` is not part of `haystack`.

Example 1:

Input: `haystack = "sadbutsad", needle = "sad"`

Output: `0`

Explanation: "sad" occurs at index 0 and 6.

The first occurrence is at index 0, so we return 0.

Example 2:

Input: `haystack = "leetcode", needle = "leeto"`

Output: `-1`

Explanation: "leeto" did not occur in "leetcode", so we return -1.

Constraints:

- `1 <= haystack.length, needle.length <= 104`
- `haystack` and `needle` consist of only lowercase English characters.