

## Ransom Note

For this problem we need to check if all characters in ransomNote can be formed using letters in magazine (each letter in magazine can be used at most once)

Approach: Frequency Count

Step:

1. Count frequency of each character in magazine.
2. For each character in ransomNote, check if enough occurrences are available:
  - If not available or count becomes negative  $\rightarrow$  return false.
3. If we process all characters successfully  $\rightarrow$  return true.

Complexity:

- Time:  $O(m+n)$  where  $m$  = ransomNote length and  $n$  = magazine length.
- Space:  $O(1)$  (fixed size array of 26 letters).