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3. Let T be a string of length m and let \mathcal{S} be a multiset of n characters. Devise an $O(m)$ time algorithm to find all substrings of T composed of all the characters from \mathcal{S} . For example, if $\mathcal{S} = \{a, b, c, c\}$ and $T = acbcagaba$, then $cbca$ is a substring of T formed from the characters of \mathcal{S} .