

Given a string `s`, sort it in decreasing order based on the frequency of characters, and return *the sorted string*.

Example 1:

Input: `s = "tree"`

Output: `"eert"`

Explanation: 'e' appears twice while 'r' and 't' both appear once.

So 'e' must appear before both 'r' and 't'. Therefore "eetr" is also a valid answer.

Example 2:

Input: `s = "cccaaa"`

Output: `"aaaccc"`

Explanation: Both 'c' and 'a' appear three times, so "aaaccc" is also a valid answer.

Note that "cacaca" is incorrect, as the same characters must be together.

Example 3:

Input: `s = "Aabb"`

Output: `"bbAa"`

Explanation: "bbaA" is also a valid answer, but "Aabb" is incorrect.

Note that 'A' and 'a' are treated as two different characters.

Constraints:

- `1 <= s.length <= 5 * 105`
- `s` consists of English letters and digits.