

21. ...You are given a string *s*, and an array of pairs of indices in the string *pairs* where *pairs*[*i*] = [*a*, *b*] indicates 2 indices(0-indexed) of the string.You can swap the characters at any pair of indices in the given pairs any number of times. Return the lexicographically smallest string that *s* can be changed to after using the swaps.

Program:

```
def smallest_string_with_swaps(s, pairs):
    parent = list(range(len(s)))

    def find(x):
        if parent[x] != x:
            parent[x] = find(parent[x])
        return parent[x]

    for a, b in pairs:
        parent[find(a)] = find(b)

    groups = {}

    for i, char in enumerate(s):
        root = find(i)
        groups.setdefault(root, []).append(char)

    for group in groups.values():
        group.sort(reverse=True)

    return ''.join(groups[find(i)].pop() for i in range(len(s)))

# Example usage:
s = "dcab"
pairs = [[0, 3], [1, 2], [0, 2]]
print(smallest_string_with_swaps(s, pairs))
```