Problem Challenge 1

We'll cover the following

Rearrange String K Distance Apart (hard)

Given a string and a number 'K', find if the string can be rearranged such that the same characters are at least 'K' distance apart from each other.

Example 1:

```
Input: "mmpp", K=2
Output: "mpmp" or "pmpm"
Explanation: All same characters are 2 distance apart.
```

Example 2:

```
Input: "Programming", K=3
Output: "rgmPrgmiano" or "gmringmrPoa" or "gmrPagimnor" and a few more
Explanation: All same characters are 3 distance apart.
```

Example 3:

```
Input: "aab", K=2
Output: "aba"
Explanation: All same characters are 2 distance apart.
```

Example 4:

```
Input: "aappa", K=3
Output: ""
Explanation: We cannot find an arrangement of the string where any two 'a' are 3 distance apart.
```

Try it yourself

Try solving this question here:

Java | Python3 | JS | C++

```python
def reorganize_string(str, k):
  # TODO: Write your code here
  return ""

def main():
  print("Reorganized string: " + reorganize_string("mmpp", 2))
  print("Reorganized string: " + reorganize_string("Programming", 3))
  print("Reorganized string: " + reorganize_string("aab", 2))
  print("Reorganized string: " + reorganize_string("aapa", 3))


main()

```

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