## **Sherlock and the Valid String**

- Crack a Hack

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## **Problem statement:**

- Sherlock validates a string to be valid or not according to the following conditions:
  - All characters in s have the same exact frequency (i.e., occur the same number of times).

Eg: aabbcc is valid whereas abbcdd is invalid

Deleting 1 character makes the string valid.

Eg: abbcc is valid whereas aaabccddd is invalid

## **Code solution – (in Python)**

```
#!/bin/python
import sys

def isValid(s):
    setString = list(set(s))
    lengthSet = len(setString)
    count = [0]*lengthSet #For creating set length of 0's lengthString = len(s)
```

```
sumSet = 0
for i in xrange(lengthString): #Find frequencies of all
elements
    for j in xrange(lengthSet):
      if s[i] == setString[j]:
         count[j] += 1
  countSum = count[0]*lengthSet
                                     #If all
frequencies are same, the total count will be this
  tempSum = count[0]*(lengthSet-1) + 1 #if one
character is having frequency 1
  for i in range(lengthSet):
    sumSet += count[i]
  #print countSum,sumSet,tempSum
  if countSum == sumSet or sumSet == tempSum or
countSum == sumSet-1:
    return "YES"
  else:
    return "NO"
```