Python - AVERAGE - PART001

Solved Challenges **7/10**

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Message Encryption

ID:2620 **Solved By 4928 Users**

To encrypt messages Jil will first decide on the number of columns C to use. Then Jil will pad the message with letters chosen randomly so that they form a rectangular matrix. Finally Jil will write down the message navigating the rows from left to right and then from right to left.

The program must accept the encrypted message M as input and then extract and print the original message (along with any additional padding letters) from the encrypted one based on the value of C.

Boundary Conditions:
Length of M is from 4 to 200.
2 <= C <= 20

Input Format:
First line will contain the string value of the encrypted message M.
Second line will contain the integer value of the column used for the encryption.

Output Format:
First line will contain the string value of the original message (along with any additional padding letters)

Sample Input/Output:

Example 1:
Input:
midinadiazne
3

Output:
madeinindiaz

Explanation:
m i d
a n i
d i a
e n z
Here z is the padding letter. The navigating across the rows mid (left to right) ina (right to left) and so on we come up with the encrypted message midinadiazne.

Example 2:
Input:
loaesfbnaiordilertenrdhdw
5

Output:
lionroaredandthebirdsflew

Explanation:
l o a e s
i a n b f
o r d i l
n e t r e
r d h d w
Here there are no padding letters. The navigating across the rows left to right and then from right to left we get loaesfbnaiordilertenrdhdw

Max Execution Time Limit: 10000 millisecs

Ambiance

Python3 (3.x)

Reset

```
M = input()
C = int(input())
length = len(M)
Rows = length//C

alt = 1
letter=-1
for head_col in range(C):
    print(M[head_col],end="")
    letter = head_col
    alt=2
    for index in range(Rows-1):
        if(alt%2!=0):
            letter+=((head_col+1)*2)-1
        else:
            letter +=((C-head_col)*2)-1
        print(M[letter],end="")
        alt+=1

```

Custom test case has passed.

SUCCESS

You have executed a custom test case. Kindly un-check "Run with a custom test case (Input/Output)" to execute challenge test cases.

Save Run

Run with a custom test case (Input/Output)