DP-S008 (E028)

Solved Challenges 1/2

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Decode Ways - Secret Message

ID:4722 **Solved By 601 Users**

A top secret message string S containing letters from A-Z (only upper case letters) is encoded to numbers using the following mapping:
'A' -> 1, 'B' -> 2 and so on till Z -> '26'
The program must print the total number of ways in which the received message can be decoded.

Boundary Condition(s):
1 <= Length of S <= 100

Input Format:
The first line contains the string S containing numbers.

Output Format:
The first line contains the number of ways in which S can be decoded.

Example Input/Output 1:
Input:
123

Output:
3

Explanation:
1-A 2-B 3-C 12-L 23-W.
Hence 123 can be decoded as ABC or AW or LC, that is in 3 ways.

Example Input/Output 2:
Input:
1290

Output:
0

Max Execution Time Limit: 500 millisecs

Ambiance

Python3 (3.x)

Reset

```
string = input()
ways = 1
prevways = 1
if(string[-1] == '0'):
    ways = 0

for index in range(len(string)-2,-1,-1):
    backup = prevways
    prevways = ways
    if(string[index] == '0'):
        ways=0
        continue
    twoDigitVal = int(string[index:index+2])
    if(twoDigitVal<=26):
        ways+=backup
    print(index)

print(ways)

```

Code did not pass the execution

TestCase ID: 14070

Input:

12345

Expected Output:

3

Your Program Output:

3
2
1

0
1

Save Run

Run with a custom test case (Input/Output)