Logo

STUDENT REPORT

DETAILS

Name

NITHYA PRAJWAL P

Roll Number

KUB23CSE096

EXPERIMENT

Title

MINIMUM NUMBER OF KEY PRESSES

Description

George has a setup which includes a special keyboard and a monitor , that initially displays 0. The special keyboard has 11 numeric keys (0,1,2,3,4,5,6,7,8,9,00). If he presses 00, the previously displayed value will be multiplied by 100. Whereas, if he presses any other numeric key, the previously displayed value will be firstly multiplied by 10 and then the number on the key will be added to it

You are given a numeric string S. Your task is to help George find and return an integer value, representing the minimum number of key presses to reach the number.

Input Specification:

input: A numeric string s. representing the final number,

Output Specification:

Return an integer value, representing the minimum number of key presses to reach the number.

Sample Input:

100

Sample Output:

2

Source Code:

```
def min_key_presses(n):
    """
    Calculate the minimum number of key presses required to type a number.

    Args:
    n (int): The input number.

    Returns:
    int: The minimum number of key presses.
    """
    # Convert the number to a string to count the number of digits
    s = str(n)

    # Initialize the count of key presses
    count = 0

    # Iterate over the digits in the number
    i = 0
    while i < len(s):
        # If the current digit is '0', it can be typed using a single key press
        if s[i] == '0':
            # Count the number of consecutive '0's
            j = i
            while j < len(s) and s[j] == '0':
                j += 1
            # Increment the count of key presses
            count += 1
            # Move to the next non-'0' digit
            i = j
        else:
            # Increment the count of key presses
            count += 1
            # Move to the next digit
            i += 1

    return count

# Test the function
print(min_key_presses(100))  # Output: 2
```

RESULT

1 / 6 Test Cases Passed | 17 %