STUDENT REPORT

DETAILS

Name

Saleha B

Roll Number

3BR23EE083

EXPERIMENT

Title

MAGIC STRING

Description

Eva has a string S containing lowercase English letters. She wants to transform this string into a Magic String, where all the characters in the string are the same. To do so, she can replace any letter in the string with another letter present in that string.

Your task is to help Eva find and return an integer value, representing the minimum number of steps required to form a Magic String. Return 0, if S is already a Magic String.

Input Specification:

input1: A string S, containing lowercase English letters.

Output Specification:

Return an integer value, representing the minimum number of steps required to form a Magic String. Return 0, if S is already a Magic String.

Sample Input:

aaabbbccdddd

Sample Output:

8

Source Code:

```
def min_steps_to_magic_string(S):
    from collections import Counter

    # Count the frequency of each character in the str
ing
    char_count = Counter(S)

    # Get the maximum frequency of any character
    max_frequency = max(char_count.values())

    # The number of steps needed to make the string a
Magic String
    steps_needed = len(S) - max_frequency

    return steps_needed

# Sample Input
input_str = "aaabbbccdddd"
# Function call
output = min_steps_to_magic_string(input_str)
print(output)  # Output: 8
```

RESULT

1 / 5 Test Cases Passed | 20 %