



# STUDENT REPORT

## DETAILS

Name

Ganesh B

Roll Number

3BR23EE028

## 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:**

aaabbbccddddd

**Sample Output:**

8

**Source Code:**

```
from collections import Counter
def min_steps_to_magic_string(S):
    if not S:
        return 0
    frequency = Counter(S)
    max_freq = max(frequency.values())
    return len(S) - max_freq

# Example usage
if __name__ == "__main__":
    import sys
    S = sys.stdin.readline().strip()
    result = min_steps_to_magic_string(S)
    print(result)
```

## RESULT

3BR

E028

23EE

3BR  
R23E

E028  
3B

23EE  
E028

3BR23  
R2