STUDENT REPORT

DETAILS

Name

Saleha B

Roll Number

3BR23EE083

EXPERIMENT

Title

SPECIAL STRING

Description

Alice has a string A consisting of lowercase English letters. Her friend gives her another string S and asks her to modify string A and replace its characters with the characters present in string S.

But, to achieve the above task, Alice must follow the below steps:

1. Choose a character from string S that has the minimum ASCII distance from the ith character in string A

Replace the ith character in string A with the chosen character in string S

Your task is to find and return an integer value, representing minimum total ASCII distance that is required to modify string A to the characters in string S. Return 0, if all the characters in string S are already present in string A

Sample Input:

abcd

xyz

Sample Output:

86

Source Code:

```python
def min_total_ascii_distance(A, S):
    # If all characters in S are present in A, return 0
    if all(char in A for char in S):
        return 0

    total_distance = 0

    # Loop through each character in A
    for char_a in A:
        # Initialize the minimum distance to a large value
        min_distance = float('inf')

        # Loop through each character in S to find the minimum ASCII distance
        for char_s in S:
            distance = abs(ord(char_a) - ord(char_s))
            min_distance = min(min_distance, distance)

        # Add the minimum distance to the total
        total_distance += min_distance

    return total_distance

# Sample Input
A = input().strip()
S = input().strip()

# Output the result
print(min_total_ascii_distance(A, S))
```

RESULT

5 / 5 Test Cases Passed | 100 %