Logo

STUDENT REPORT

DETAILS

Name

JAYARAM

Roll Number

22BI24CV413-T

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:

```
def min_ascii_distance(A: str, S: str) -> int:
    total_distance = 0

    for char_a in A:
        min_distance = float('inf')

        for char_s in S:
            distance = abs(ord(char_a) - ord(char_s))
            min_distance = min(min_distance, distance)

        total_distance += min_distance

    return total_distance

A = "abcd"
S = "xyz"
print(min_ascii_distance(A, S))
```

RESULT

1 / 5 Test Cases Passed | 20 %