Designer PDF Viewer

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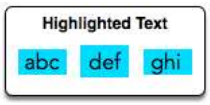
Problem Submissions Leaderboard Discussions Editorial

When you select a contiguous block of text in a PDF viewer, the selection is highlighted with a blue rectangle. In a new kind of PDF viewer, the selection of each word is independent of the other words; this means that each rectangular selection area forms independently around each highlighted word. For example:



In this type of PDF viewer, the *width* of the rectangular selection area is equal to the number of letters in the word times the width of a letter, and the *height* is the maximum height of any letter in the word.

Consider a word consisting of lowercase English alphabetic letters, where each letter is $1mm$ wide. Given the height of each letter in millimeters (mm), find the total area that will be highlighted by blue rectangle in mm^2 when the given word is selected in our new PDF viewer.

Input Format

The first line contains 26 space-separated integers describing the respective heights of each consecutive lowercase English letter (i.e., $h_a, h_b, h_c, \ldots, h_y, h_z$).
The second line contains a single word, consisting of lowercase English alphabetic letters.

Constraints

- $1 \leq h_? \leq 7$, where $?$ is an English lowercase letter.
- Word contains no more than 10 letters.

Output Format

Print a single integer denoting the area of highlighted rectangle when the given word is selected. The unit of measurement for this is square millimeters (mm^2), but you must only print the integer.

Sample Input

```
1 3 1 3 1 4 1 3 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
abc
```

Sample Output

```
9
```

Explanation

We are highlighting the word `abc`:

1. The tallest letter in `abc` is `b`, and $h_b = 3$. The selection area for this word is $3 \cdot 1mm \cdot 3mm = 9mm^2$.

Note: Recall that the width of each character is $1mm$.

Submissions: 25312
Max Score: 20
Difficulty: Easy

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Current Buffer (saved locally, editable) Java 7

```
import java.io.*;
import java.util.*;
import java.text.*;
import java.math.*;
import java.util.regex.*;

public class Solution {

    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        int[] h = new int[26];
        for(int h_i=0; h_i < 26; h_i++){
            h[h_i] = in.nextInt();
        }
        String word = in.next();

        HashMap<Character, Integer> hashMap = new HashMap<>();
        for (int i=0; i<word.length(); i++) {
            hashMap.put(word.charAt(i), h[word.charAt(i) - 'a']);
        }

        int max=0;
        for (int i=0; i<word.length(); i++) {
            int entry = hashMap.get(word.charAt(i));
            if (entry > max)
                max = entry;
        }

        System.out.println( (word.length()*1*max));
}

}
```

Line: 24 Col: 36

Upload Code as File Test against custom input Run Code Submit Code

Congrats, you solved this challenge!

- ✔ Test Case #0
- ✔ Test Case #1
- ✔ Test Case #2
- ✔ Test Case #3
- ✔ Test Case #4
- ✔ Test Case #5

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