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Designer PDF Viewer



by darkshadows

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When you select a contiguous block of text in a PDF viewer, the selection is highlighted with a blue rectangle. In this PDF viewer, each word is highlighted independently. For example:



In this challenge, you will be given a list of letter heights in the alphabet and a string. Using the letter heights given, determine the area of the rectangle highlight in mm^2 assuming all letters are $1mm$ wide.

Input Format

The first line contains **26** space-separated integers describing the respective heights of each consecutive lowercase English letter, `ascii[a-z]`. The second line contains a single word, consisting of lowercase English alphabetic letters.

Constraints

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

Output Format

Print a single integer denoting the area in mm^2 of highlighted rectangle when the given word is selected. Do not print units of measure.

Sample Input 0

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

Sample Output 0

9

Explanation 0

We are highlighting the word `abc`:

Letter heights are $a = 1$, $b = 3$ and $c = 1$. The tallest letter, b , is $3mm$ high. The selection area for this word is $3 \cdot 1mm \cdot 3mm = 9mm^2$.

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

Sample Input 1

```
1 3 1 3 1 4 1 3 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 7
zaba
```

Sample Output 1

Explanation 1

The tallest letter in *zaba* is *z* at *7mm*. The selection area for this word is $4 \times 1mm \times 7mm = 28mm^2$.

Easy

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Current Buffer (saved locally, editable)

C++14

```
1 #include <iostream>
2 #include <map>
3 #include <algorithm>
4 #include <limits>
5
6 int main()
7 {
8     std::map<char, int> alphaMap;
9     int Char = 97;
10    for(int i = 0; i<26; ++i)
11    {
12        int temp; std::cin >> temp;
13        alphaMap[static_cast<char>(Char)] = temp;
14        ++Char;
15    }
16
17    int height = std::numeric_limits<int>::min();
18    std::string word; std::cin >> word;
19
20    for(const auto &it: word)
21        height = std::max(height, alphaMap[it]);
22
23    std::cout << height*word.size() << std::endl;
24
25    return 0;
26 }
27
```

Line: 27 Col: 1

[Upload Code as File](#)☐ Test against custom input

Run Code

Submit Code

Congrats, you solved this challenge!

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- ✓ Test Case #0
- ✓ Test Case #3
- ✓ Test Case #6

- ✓ Test Case #1
- ✓ Test Case #4

- ✓ Test Case #2
- ✓ Test Case #5

You've earned 20.00 points.

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