Marwadi University	Marwadi University Faculty of Technology Department of Information and Communication Technology	
Sem : 5	Name :Pushti Depani	
Day : 24	Date : 10/11/2022	Enrollment No: 92000133018

CP Club 365Days Challenge

Date – 10/11/2022

Programming language – only C language

Problem Statement

Code must be in C language only

https://www.hackerrank.com/challenges/designer-pdf-viewer/problem?isFullScreen=true

Your Code:

```c
#include <assert.h>
#include <ctype.h>
#include <limits.h>
#include <math.h>
#include <stdbool.h>
#include <stddef.h>
#include <stdint.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

char* readline();
char* ltrim(char*);
char* rtrim(char*);
char** split_string(char*);

int parse_int(char*);

/*
 * Complete the 'designerPdfViewer' function below.
 *
 * The function is expected to return an INTEGER.
```

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```
 * The function accepts following parameters:
 *  1. INTEGER_ARRAY h
 *  2. STRING word
 */

int designerPdfViewer(int h_count, int* h, char* word) {
    int alpha=0;
    for (int i=0; i<(strlen(word));i++) {
        if(h[word[i]-97]>alpha){
            alpha=h[word[i]-97];
        }
    }
    return alpha*(strlen(word));


    // for(int h_i = 0; h_i < 26; h_i++){
    //    scanf("%d",&h[h_i]);
    // }
    // int len=strlen(word);
    // if(len==0)
    //     exit(0);
    // int temp=h[word[0]-97];
    // for(int i=1;i<len;i++)
    //     {
    //     if(temp<h[word[i]-97])
    //         temp=h[word[i]-97];
    // }
    // printf("%d",temp*len);
    // return 0;



}

int main()
{
    FILE* fptr = fopen(getenv("OUTPUT_PATH"), "w");

    char** h_temp = split_string(rtrim(readline()));

    int* h = malloc(26 * sizeof(int));
```

```
    for (int i = 0; i < 26; i++) {
        int h_item = parse_int(*(h_temp + i));

        *(h + i) = h_item;
    }

    char* word = readline();

    int result = designerPdfViewer(26, h, word);

    fprintf(fptr, "%d\n", result);

    fclose(fptr);

    return 0;
}

char* readline() {
    size_t alloc_length = 1024;
    size_t data_length = 0;

    char* data = malloc(alloc_length);

    while (true) {
        char* cursor = data + data_length;
        char* line = fgets(cursor, alloc_length - data_length, stdin);

        if (!line) {
            break;
        }

        data_length += strlen(cursor);

        if (data_length < alloc_length - 1 || data[data_length - 1] == '\n') {
            break;
        }

        alloc_length <<= 1;
```

```
        data = realloc(data, alloc_length);

        if (!data) {
            data = '\0';

            break;
        }
    }

    if (data[data_length - 1] == '\n') {
        data[data_length - 1] = '\0';

        data = realloc(data, data_length);

        if (!data) {
            data = '\0';
        }
    } else {
        data = realloc(data, data_length + 1);

        if (!data) {
            data = '\0';
        } else {
            data[data_length] = '\0';
        }
    }

    return data;
}

char* ltrim(char* str) {
    if (!str) {
        return '\0';
    }

    if (!*str) {
        return str;
    }

    while (*str != '\0' && isspace(*str)) {
```

```
        str++;
    }

    return str;
}

char* rtrim(char* str) {
    if (!str) {
        return '\0';
    }

    if (!*str) {
        return str;
    }

    char* end = str + strlen(str) - 1;

    while (end >= str && isspace(*end)) {
        end--;
    }

    *(end + 1) = '\0';

    return str;
}

char** split_string(char* str) {
    char** splits = NULL;
    char* token = strtok(str, " ");

    int spaces = 0;

    while (token) {
        splits = realloc(splits, sizeof(char*) * ++spaces);

        if (!splits) {
            return splits;
        }

        splits[spaces - 1] = token;
```

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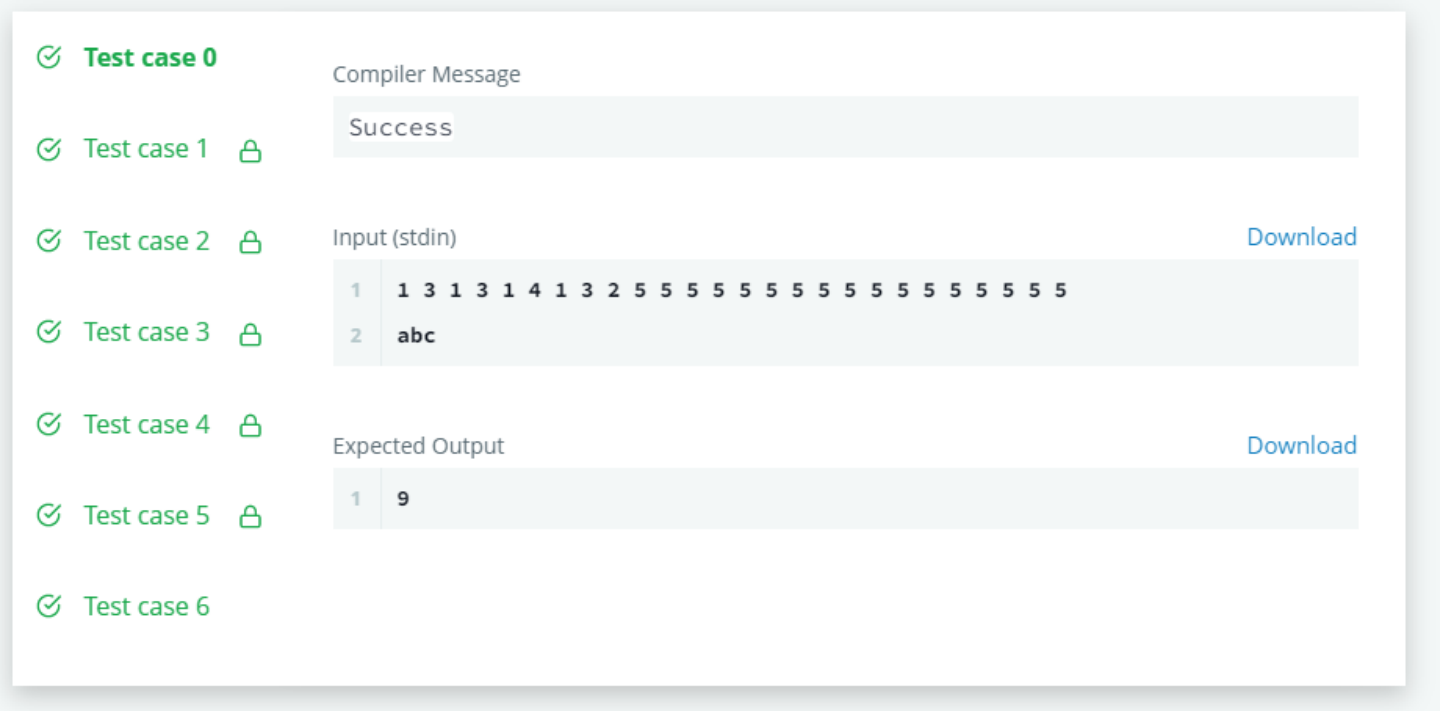
```
        token = strtok(NULL, " ");
    }

    return splits;
}

int parse_int(char* str) {
    char* endptr;
    int value = strtol(str, &endptr, 10);

    if (endptr == str || *endptr != '\0') {
        exit(EXIT_FAILURE);
    }

    return value;
}
```

Output (Screen Shot):



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Understanding about problem:

In this program I have understood that is a text according to which we have to return the ans. The input will be given as integer and that will represent the alphabetical orders i.e., a to z a=1, z=26. And then the string will be given eg. Abc. So in the string 'abc' the first letter is a so the value which will be specified for that we have to take and from the whole string we have to take the highest value of the letter and then we have to multiply that value with the total number of char i.e., string. This will give the ans. Eg. 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 5 5 5 5 5

abc

so here a=1, b=3,c=1

so highest is 3 and the string length is also 3 so we will multiply it 3*3 =9.

Answer = 9.

Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.

ALL THE BEST

Team CP Club