## GE23131-Programming Using C-2024

## Quiz navigation



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Status Finished

Started Monday, 13 January 2025, 8:56 AM

Completed Monday, 13 January 2025, 10:09 AM

**Duration** 1 hour 13 mins

Question 1

Correct
Marked out of

Flag question

Two strings **A** and **B** comprising of lower case English letters are compatible if they are equal or can be made equal by following this step any number of times:

Select a prefix from the string **A** (possibly empty), and increase the alphabetical value of all the characters in the prefix by the same valid amount. For example, if the string is **xyz** and we select the prefix **xy** then we can convert it to **yx** by increasing the alphabetical value by 1. But if we select the prefix **xyz** then we cannot increase the alphabetical value.

Your task is to determine if given strings A and B are compatible.

Input format

First line: String A

Next line: String B

**REC-CIS Output format** For each test case, print **YES** if string **A** can be converted to string **B**, otherwise print **NO**. Constraints  $1 \le \text{len}(A) \le 1000000$  $1 \le len(B) \le 1000000$ SAMPLE INPUT abaca cdbda SAMPLE OUTPUT YES Explanation

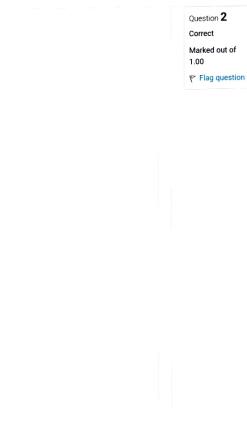
The string abaca can be converted to bcbda in one move and to cdbda in the next move.

```
Answer: (penalty regime: 0 %)
      #include<stdio.h>
      #include<string.h>
      int main()
   4 ▼ {
           char str1[1000000],str2[1000000];
           int flag=1;
           scanf("%s",str1);
           scanf("%s",str2);
           int a=strlen(str1);
  10
           int b=strlen(str2);
  11
          if(a==b)
  12 ▼
           {
  13
               for(int i=a-1;i>=0;i--)
  14 ▼
  15
                   while(str1[i]!=str2[i])
  16 ▼
  17
                       for(int j=0;j<=i;j++)</pre>
  18 ₩
  19
                           if(str1[j]<'z')
  20
                           str1[j]++;
  21
                           else
  22 ▼
  23
                                flag=0;
  24
                                break;
  25
  26
                           if(flag==0)
  27
                           break;
  28
  29
  30
  31
  32
          else
  33
           flag=0;
  34
           if(flag==0)
  35
           printf("NO");
  36
           else
```

```
ciiai Sti i[ivuvvvv], Sti Z[ivuvvvv],
        int flag=1;
 6
        scanf("%s", str1);
        scanf("%s", str2);
        int a=strlen(str1);
10
        int b=strlen(str2);
11
        if(a==b)
12 ▼
13
             for(int i=a-1;i>=0;i--)
14 ▼
15
                 while(str1[i]!=str2[i])
16 ▼
17
                     for(int j=0;j<=i;j++)</pre>
18 ₩
19
                         if(str1[j]<'z')
20
                         str1[j]++;
21
                          else
22 ▼
23
                              flag=0;
24
                              break;
25
26
                          if(flag==0)
27
                          break;
29
30
31
32
        else
33
        flag=0;
34
        if(flag==0)
35
        printf("NO");
36
        else
37
        printf("YES");
38
        return 0:
39 |}
```

```
17
                     for(int j=0;j<=i;j++)</pre>
18 ▼
19
                         if(str1[j]<'z')
20
                         str1[j]++;
21
                         else
22 ₹
23
                              flag=0;
24
                              break;
25
26
                         if(flag==0)
27
                         break;
28
29
30
31
32
        else
        flag=0;
33
34
        if(flag==0)
35
        printf("NO");
36
        else
37
        printf("YES");
38
        return 0;
39 }
```





 $1 \le N \le 100$ 

SAMPLE INPUT

Danny has a possible list of passwords of Manny's facebook account. All passwords length is odd. But Danny knows that Manny is a big fan of palindromes. So, his password and reverse of his password both should be in the list. You have to print the length of Manny's password and it's middle character. Note: The solution will be unique. INPUT The first line of input contains the integer N, the number of possible passwords. Each of the following N lines contains a single word, its length being an odd number greater than 2 and lesser than 14. All characters are lowercase letters of the English alphabet. OUTPUT The first and only line of output must contain the length of the correct password and its central letter. CONSTRAINTS

```
abc
def
feg
cba
SAMPLE OUTPUT
3 b
Answer: (penalty regime: 0 %)
      |#include<stdio.h>
      #include<string.h>
      int main()
   4 ▼ {
          int n,flag=0;
          char temp;
      scanf("%d",&n);
      char words[n][14];
   9 for(int i=0;i<n;i++)
  10 | scanf("%s", words[i]);
  11 char reverse[14];
      for(int i=0;i<n;i++)
  12
  13 ▼ {
  14
          strcpy(reverse,words[i]);
  15
          int size=strlen(reverse);
  16
          for(int k=0; k<size/2; k++)</pre>
  17 ▼
```

```
|#include<stdio.h>
   #include<string.h>
    int main()
 4 ▼
 5
        int n,flag=0;
        char temp;
    scanf("%d",&n);
   char words[n][14];
   for(int i=0;i<n;i++)
10 | scanf("%s", words[i]);
   char reverse[14];
    for(int i=0;i<n;i++)</pre>
13 ▼ {
14
        strcpy(reverse,words[i]);
15
        int size=strlen(reverse);
16
        for(int k=0;k<size/2;k++)</pre>
17 ▼
18
            temp=reverse[k];
19
            reverse[k]=reverse[size-k-1];
20
            reverse[size-k-1]=temp;
21
22
        for(int j=i+1; j<n; j++)
23 ▼
        {
24
            if(strcmp(reverse,words[j])==0)
25 ▼
26
                flag=1;
27
                break;
28
29
30
        if(flag==1)
31
        break;
32
   int len=strlen(reverse);
   printf("%d %c",len,reverse[len/2]);
35
   return 0;
36
```

```
18
            temp=reverse[k];
19
            reverse[k]=reverse[size-k-1];
20
            reverse[size-k-1]=temp;
21
22
        for(int j=i+1; j<n; j++)</pre>
23 ▼
24
            if(strcmp(reverse,words[j])==0)
25 ₹
26
                flag=1;
27
                break;
28
29
30
        if(flag==1)
31
        break;
32
   int len=strlen(reverse);
   printf("%d %c",len,reverse[len/2]);
35
   return 0;
36 }
```



Correct Marked out of 1.00 P Flag question

Question 3

Joey loves to eat Pizza. But he is worried as the quality of pizza made by most of the restaurants is deteriorating. The confused about the restaurant from where he should order. As always he asks Chandler for help. help him out? Input: First line has N, the total number of restaurants. spaces, all lowercase letters and will not be more than 20 characters. Output: Print the name of the restaurant that Joey should choose. Constraints:

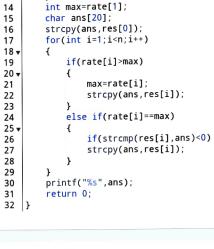
1 <= N <= 10<sup>5</sup>

last few pizzas ordered by him did not taste good :(. Joey is feeling extremely hungry and wants to eat pizza. But he is Chandler suggests that Joey should give each restaurant some points, and then choose the restaurant having maximum points. If more than one restaurant has same points, Joey can choose the one with lexicographically smallest name. Joey has assigned points to all the restaurants, but can't figure out which restaurant satisfies Chandler's criteria. Can you Next N lines contain Name of Restaurant and Points awarded by Joey, separated by a space. Restaurant name has no

REC-CIS	
	Constraints:
	1 <= N <= 10 <sup>5</sup>
	1 <= Points <= 10 <sup>6</sup>
	SAMPLE INPUT
	3
	Pizzeria 108
	Dominos 145
	Pizzapizza 49
	SAMPLE OUTPUT
	Dominos
	Explanation
	Dominos has maximum points.
	Answer: (penalty regime: 0 %)
	1   #include <stdio.h> 2   #include<string.h></string.h></stdio.h>

```
Answer: (penalty regime: 0 %)
     #include<stdio.h>
   2 #include<string.h>
      int main()
   4 ▼ {
          int n;
   5
          scanf("%d",&n);
          char res[n][21];
   7
   8
          int rate[n];
          for(int i=0;i<n;i++)
  10 ▼
              scanf("%s",res[i]);
  11
  12
              scanf("%d",&rate[i]);
  13
  14
          int max=rate[1];
  15
          char ans[20];
  16
          strcpy(ans,res[0]);
  17
          for(int i=1;i<n;i++)
  18 ₩
  19
              if(rate[i]>max)
  20 ▼
  21
                  max=rate[i];
  22
                   strcpy(ans,res[i]);
  23
               else if(rate[i]==max)
  24
  25 ₹
  26
                  if(strcmp(res[i],ans)<0)</pre>
                   strcpy(ans,res[i]);
  27
  28
  29
  30
          printf("%s",ans);
          return 0;
  31
  32 }
```

```
REC-CIS
```



scanf("%d",&rate[i]);

12 13



REC-CIS		
	Question <b>4</b> Correct Marked out of 1.00	These days Bechan Chacha is depressed because his crush gave him list of mobile number some of them are valid and some of them are invalid. Bechan Chacha has special power that he can pick his crush number only if he has valid set of mobile numbers. Help him to determine the valid numbers.
	♥ Flag question	You are given a string "S" and you have to determine whether it is Valid mobile number or not. Mobile number is valid only if it is of length 10, consists of numeric values and it shouldn't have prefix zeroes.
		Input:
		First line of input is T representing total number of test cases.  Next T line each representing "S" as described in in problem statement.
		Output:
		Print "YES" if it is valid mobile number else print "NO".  Note: Quotes are for clarity.
		Constraints:
		$1 \le T \le 10^3$ sum of string length $\le 10^5$

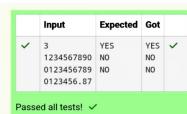
SAMDLE INDUT

REC-CIS	
	Output:
	Print "YES" if it is valid mobile number else print "NO".
	Note: Quotes are for clarity.
	Constraints:
	$1 <= T <= 10^3$
	sum of string length <= 10 <sup>5</sup>
	SAMPLE INPUT
	3
	1234567890
	0123456789
	0123456.87
	SAMPLE OUTPUT
	YES
	NO
	NO



```
#include<string.h>
    int main()
 4 ▼ {
        int t;
        scanf("%d",&t);
        while(t--)
 8 ₩
 9
            int flag=1;
10
            char s[1000000];
11
            scanf("%s",s);
12
            int k=strlen(s);
13
            if(k==10)
14 ▼
15
                for(int i=0;i<10;i++)
16 ₩
17
                    if(s[0]=='0')
18 ₩
19
                         flag=0;
20
                        break;
21
22
                    if(s[i]<'0'||s[i]>'9')
23 ▼
24
                         flag=0;
25
                         break;
26
27
28
29
            else
30
            flag=0;
31
            if(flag==1)
32
            printf("YES\n");
33
            else
34
            printf("NO\n");
35
36
        return 0;
37 }
```

```
if(s[i]<'0'||s[i]>'9')
22
23 ▼
24
                          flag=0;
25
                          break;
26
27
28
29
             else
             flag=0;
if(flag==1)
30
31
32
             printf("YES\n");
33
             else
34
             printf("NO\n");
35
36
37 }
        return 0;
```



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