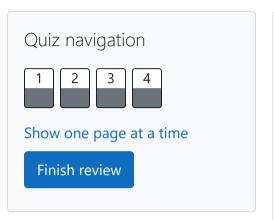
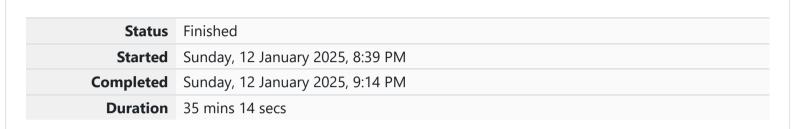
GE23131-Programming Using C-2024





Question **1**

Incorrect

Marked out of 1.00

▼ 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

Output format

NO. Constraints $1 \leq len(A) \leq 1000000$ $1 \leq len(B) \leq 1000000$ **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 %) 1 include<stdio.h> 2 #include<string.h> 3 int main() 4 {char str1[1000000],str2[1000000];

F int flag-1:

```
a=strien(stri);
int b=strlen(str2);}
```

```
Syntax Error(s)
__tester__.c:1:8: error: expected '=', ',', ';', 'asm' or '__attribute__'
before '<' token
    1 | include<stdio.h>
In file included from __tester__.c:2:
/usr/include/string.h:44:22: error: unknown type name 'size t'
   44
                            size_t __n) __THROW __nonnull ((1, 2));
                             ^~~~~
/usr/include/string.h:34:1: note: 'size_t' is defined in header '<stddef.h>';
did you forget to '#include <stddef.h>'?
   33 | #include <stddef.h>
 +++ |+#include <stddef.h>
   34
/usr/include/string.h:47:56: error: unknown type name 'size t'
   47 | extern void *memmove (void * dest, const void * src, size t n)
/usr/include/string.h:47:56: note: 'size_t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:61:42: error: unknown type name 'size_t'
```

```
/usr/include/string.h:61:42: note: 'size t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:64:56: error: unknown type name 'size t'
   64 | extern int memcmp (const void * s1, const void * s2, size t n)
/usr/include/string.h:64:56: note: 'size t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:80:60: error: unknown type name 'size t'
   80 | extern int memcmpeq (const void * s1, const void * s2, size t
__n)
                                                                  ^~~~~
/usr/include/string.h:80:60: note: 'size t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:107:48: error: unknown type name 'size t'
 107 | extern void *memchr (const void * s, int c, size t n)
/usr/include/string.h:107:48: note: 'size t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:145:53: error: unknown type name 'size t'
 145
                             const char * restrict src, size t n)
/usr/include/string.h:145:53: note: 'size t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:153:23: error: unknown type name 'size t'
 153
                             size t n) THROW nonnull ((1, 2));
                              ^~~~~
/usr/include/string.h:153:23: note: 'size t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:159:57: error: unknown type name 'size t'
 159 | extern int strncmp (const char * s1, const char * s2, size t n)
/usr/include/string.h:159:57: note: 'size t' is defined in header
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:166:8: error: unknown type name 'size t'
  166 | extern size t strxfrm (char * restrict dest,
/usr/include/string.h:167:54: error: unknown type name 'size t'
```

```
'<stddef.h>'; did you forget to '#include <stddef.h>'?
/usr/include/string.h:293:8: error: unknown type name 'size t'
  293 | extern size t strcspn (const char * s, const char * reject)
/usr/include/string.h:297:8: error: unknown type name 'size t'
  297 | extern size t strspn (const char * s, const char * accept)
/usr/include/string.h:407:8: error: unknown type name 'size t'
  407 | extern size t strlen (const char * s)
             ^~~~~
tester .c: In function 'main':
tester .c:6:1: error: implicit declaration of function 'scanf' [-
Werror=implicit-function-declaration]
   6 | scanf("%s",str1);
      ^~~~
tester .c:3:1: note: include '<stdio.h>' or provide a declaration of
'scanf'
    2 | #include<string.h>
 +++ | +#include <stdio.h>
    3 | int main()
tester .c:6:1: error: incompatible implicit declaration of built-in
function 'scanf' [-Werror=builtin-declaration-mismatch]
    6 | scanf("%s", str1);
      ^~~~
tester .c:6:1: note: include '<stdio.h>' or provide a declaration of
'scanf'
tester .c:9:5: error: unused variable 'b' [-Werror=unused-variable]
   9 | int b=strlen(str2);}
tester .c:8:5: error: unused variable 'a' [-Werror=unused-variable]
    8 | int a=strlen(str1);
__tester__.c:5:5: error: unused variable 'flag' [-Werror=unused-variable]
    5 | int flag=1;
cc1: all warnings being treated as errors
```

Marked out of 1.00

Flag question

iength 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

 $1 \le N \le 100$

SAMPLE INPUT

feg cba **SAMPLE OUTPUT** 3 b #include<stdio.h> #include<string.h> int main() 3 4 ▼ { int n,flag=0; 5 char temp; scanf("%d",&n); char words[n][14]; 8 for(int i=0;i<n;i++)</pre> 9 scanf("%s",words[i]); 10 11 char reverse[14]; 12 for(int i=0;i<n-1;i++)</pre> 13 🔻

```
Answer: (penalty regime: 0 %)
                strcpy(reverse,words[i]);
   14
                int size=strlen(reverse);
   15
   16
                for(int k=0;k<size/2;k++)</pre>
   17 🔻
                    temp=reverse[k];
   18
                    reverse[k]=reverse[size-k-1];
   19
                    reverse[size-k-1]=temp;
   20
   21
   22
                for(int j=i+1; j<n; j++)</pre>
   23 1
   24
                    if(strcmp(reverse,words[j])==0)
   25 ,
```

| | Input | Expected | Got | |
|---|-------|----------|-----|----------|
| ~ | 4 | 3 b | 3 b | ~ |
| | abc | | | |
| | def | | | |
| | feg | | | |
| | cba | | | |

Passed all tests! <

Question **3**

Correct

Marked out of 1.00

Flag question

Joey loves to eat Pizza. But he is worried as the quality of pizza made by most of the restaurants is deteriorating. The last few pizzas ordered by him did not taste good :(. Joey is feeling extremely hungry and wants to eat pizza. But he is confused about the restaurant from where he should order. As always he asks Chandler for help.

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.

Input:

First line has N, the total number of restaurants.

Next N lines contain Name of Restaurant and Points awarded by Joey, separated by a space. Restaurant name has **no spaces**, all lowercase letters and will not be more than 20 characters.

Output:

Print the name of the restaurant that Joey should choose.

Constraints:

$$1 <= N <= 10^5$$

SAMPLE INPUT

3

Pizzeria 108

Dominos 145

Pizzapizza 49

SAMPLE OUTPUT

Explanation

Dominos has maximum points.

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
   #include<string.h>
    int main()
 3
 4 🏻
    int n;
    scanf("%d",&n);
    char res[n][21];
    int rate[n];
    for(int i=0;i<n;i++)</pre>
10 ▼
11
    scanf("%s",res[i]);
    scanf("%d",&rate[i]);
12
13
    int max=rate[0];
14
    char ans[20];
15
16
    strcpy(ans,res[0]);
17
    for(int i=1;i<n;i++)</pre>
18 ▼ {
    if(rate[i]>max)
19
20 1
21
    max=rate[i];
    strcpy(ans,res[i]);
22
23
24
    else if(rate[i]==max)
25 ▼
26
    if(strcmp(res[i],ans)<0)</pre>
    strcpy(ans,res[i]);
27
28
29
    printf("%s",ans);
30
```

| | Input | Expected | Got | |
|---|---|----------|---------|----------|
| ~ | 3 Pizzeria 108 Dominos 145 Pizzapizza 49 | Dominos | Dominos | ~ |

Passed all tests! <

Question **4**

Correct

Marked out of 1.00

▼ Flag question

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.

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:

11

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:

Note: Quotes are for clarity.

Constraints:

```
1 \le T \le 10^3
sum of string length \le 10^5
```

SAMPLE INPUT

3

1234567890

0123456789

0123456.87

SAMPLE OUTPUT

YES

NO

NO

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
#include<string.h>
int main()

full time in tin
```

```
|int +Lag=1;
10 char s[100000];
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
   if(s[i]<'0'||s[i]>'9')
22
23 ▼ {
24
    flag=0;
25
    break;
26
27
28
29
    else
30
   flag=0;
   if(flag==1)
32
    printf("YES\n");
33
    else
    printf("NO\n");
34
35
36
    return 0;
37
```

| | Input | Expected | Got | |
|---|------------|----------|-----|---|
| ~ | 3 | YES | YES | ~ |
| | 1234567890 | NO | NO | |
| | 0123456789 | NO | NO | |
| | 0123456.87 | | | |

Finish review