

## 05 – String and its Operations

Ex. No.: 5.1

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Given two Strings s1 and s2, remove all the characters from s1 which is present in s2.

### Constraints

1 <= string length <= 200

### Sample Input 1

experience  
enc

### Sample Output 1

xpri

**Answer:** (penalty regime: 0 %)

```
1 s1 = list(input())
2 s2 = list(input())
3 for i in s2:
4     for j in s1:
5         if(i == j):
6             s1.remove(j)
7 s = ""
8 for i in s1:
9     s = s + i
10 print(s)
```

Output:

	Input	Expected	Got	
✓	experience enc	xpri	xpri	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 1.00/1.00.

Ex. No.: 5.2

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Robert is having 2 strings consist of uppercase & lowercase english letters. Now he want to compare those two strings lexicographically. The letters' case does not matter, that is an uppercase letter is considered equivalent to the corresponding lowercase letter.

## Input

The first line contains **T**. Then **T** test cases follow.

Each test case contains a two lines contains a string. The strings' lengths range from 1 to 100 inclusive. It is guaranteed that the strings are of the same length and also consist of uppercase and lowercase Latin letters.

## Output

If the first string is less than the second one, print "-1".

If the second string is less than the first one, print "1".

If the strings are equal, print "0".

Note that the letters' case is not taken into consideration when the strings are compared.

## Constraints

$$1 \leq T \leq 50$$

$$\text{String length} \leq 100$$

## Program:

```
1 t = int(input())
2 while(t != 0):
3     s1 = input().lower()
4     s2 = input().lower()
5     if(s1 < s2):
6         print("-1")
7     elif(s1 == s2):
8         print("0")
9     else:
10        print(1)
11    t = t - 1
12
13
```

## Output:

	Input	Expected	Got	
✓	3	0	0	✓
	aaaa	-1	-1	
	aaaA	1	1	
	abs			
	Abz			
	abcdeffg			
	AbCdEeFF			
Passed all tests! ✓				
Correct				
Marks for this submission: 1.00/1.00.				

Ex. No.: 5.3

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Two string values S1, S2 are passed as the input. The program must print first N characters present in S1 which are also present in S2.

**Input Format:**

The first line contains S1.

The second line contains S2.

The third line contains N.

**Output Format:**

The first line contains the N characters present in S1 which are also present in S2.

**Boundary Conditions:**

$2 \leq N \leq 10$

$2 \leq \text{Length of S1, S2} \leq 1000$

**Example Input/Output 1:**

Input:

abcbde

cdefghbb

3

Output:

bcd

Program:

```
1 s1 = input()
2 s2 = input()
3 n = int(input())
4 s = ""
5 for i in s1:
6     for j in s2:
7         if(i == j):
8             if(i not in s):
9                 s = s + i
10 print(s[:n])
```

Output:

	Input	Expected	Got	
✓	abcbde cdefghbb 3	bcd	bcd	✓
Passed all tests! ✓				
Correct				
Marks for this submission: 1.00/1.00.				

Ex. No.: 5.4

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Write a program to check if two strings are balanced. For example, strings s1 and s2 are balanced if all the characters in the s1 are present in s2. The character's position doesn't matter. If balanced display as "true", otherwise "false".

**For example:**

Input	Result
Yn PYnative	True

**Answer:** (penalty regime: 0 %)

```
1 s1 = input()
2 s2 = input()
3 l = []
4 for i in s1:
5     if i in s2:
6         f = 1
7     else:
8         f = 0
9     l.append(f)
10 if 0 in l:
11     print("False")
12 else:
13     print("True")
```

Output:

	Input	Expected	Got	
✓	Yn PYnative	True	True	✓
✓	Ynf PYnative	False	False	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 1.00/1.00.

Ex. No.: 5.5

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Given a string S which is of the format USERNAME@DOMAIN.EXTENSION, the program must print the EXTENSION, DOMAIN, USERNAME in the reverse order.

### Input Format:

The first line contains S.

### Output Format:

The first line contains EXTENSION.

The second line contains DOMAIN.

The third line contains USERNAME.

### Boundary Condition:

1 <= Length of S <= 100

### Example Input/Output 1:

Input:

abcd@gmail.com

Output:

com

gmail

### Program:

```
1 s = input()
2 l = s.split("@")
3 r = l[-1].partition(".")
4 print(r[-1], "\n", r[0], "\n", l[0], sep="")
```

### Output:

	Input	Expected	Got	
✓	abcd@gmail.com	com gmail abcd	com gmail abcd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Ex. No.: 5.6

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Find if a String2 is substring of String1. If it is, return the index of the first occurrence. else return -1.

### Sample Input 1

this test123string

123

### Sample Output 1

8

**Answer:** (penalty regime: 0 %)

```
1 st = input()
2 n = input()
3 res = 0
4 for i in range(len(st)):
5     if(st[i] == n[0]):
6         res = i
7         break
8 print(res)
```

Output:

	Input	Expected	Got	
✓	this test123string 123	8	8	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 1.00/1.00.

Ex. No.: 5.7

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Write a python to read a sentence and print its longest word and its length

**For example:**

Input	Result
This is a sample text to test	sample 6

**Answer:** (penalty regime: 0 %)

```
1 s = input().split(" ")
2 d = {}
3 for i in s:
4     if len(i) not in d:
5         d[len(i)] = i
6 print(d[max(d)],"\n",max(d),sep = "")
```

Output:

	Input	Expected	Got
✓	This is a sample text to test	sample 6	sampl 6
✓	Rajalakshmi Engineering College, approved by AICTE	Rajalakshmi 11	Rajal 11
✓	Cse IT CSBS MCT	CSBS 4	CSBS 4

Passed all tests! ✓

**Correct**

Marks for this submission: 1.00/1.00.

Ex. No.: 5.8

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Write a python program to count all letters, digits, and special symbols respectively from a given string

**For example:**

Input	Result
rec@123	3
	3
	1

**Answer:** (penalty regime: 0 %)

```
1 s = input()
2 l = d = sy = 0
3 for i in s:
4     if(i.isalpha()):
5         l += 1
6     elif(i.isdigit()):
7         d += 1
8     else:
9         sy += 1
10 print(l,"\n",d,"\n",sy,sep="")
```

**Output:**

	Input	Expected	Got	
✓	rec@123	3	3	✓
		3	3	
		1	1	
✓	P@#yn26at^&i5ve	8	8	✓
		3	3	
		4	4	
✓	abc@12&	3	3	✓
		2	2	
		2	2	

Passed all tests! ✓

**Correct**

Marks for this submission: 1.00/1.00.



Ex. No.: 5.9

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

Take string as an input from stdin.

Output format:

Print the word is key word or not.

Example Input:

break

Output:

break is a keyword

Example Input:

IF

Output:

IF is not a keyword

**For example:**

Input	Result
break	break is a keyword
IF	IF is not a keyword

Program:

```
1 s = input()
2 l = ["break", "case", "continue", "default", "defer", "else",
3 if s in l:
4     print(s,"is a keyword")
5 else:
6     print(s,"is not a keyword")
```

Output:

	Input	Expected	Got	
✓	break	break is a keyword	break is a keyword	✓
✓	IF	IF is not a keyword	IF is not a keyword	✓

Passed all tests! ✓

Ex. No.: 5.10

Date:

Register No.: 2116231501105

Name: Nandhini Prakash

**Reverse** a string **without affecting special characters**

Given a string **S**, containing special characters and all the alphabets, reverse the string without affecting the positions of the special characters.

**Input:**

A&B

**Output:**

B&A

**Explanation:** As we ignore '&' and

As we ignore '&' and then reverse, so answer is "B&A".

**For example:**

Input	Result
A&x#	x&A#

Program:

```
1 s = list(input())
2 l = []
3 for i in range(len(s)):
4     if s[i].isalpha():
5         l.append(s[i])
6         s[i] = "0"
7 l.reverse()
8 c = 0
9 for i in range(len(s)):
10    if(s[i] == "0"):
11        s[i] = l[c]
12        c += 1
13 res = ""
14 for i in s:
15     res = res + i
16 print(res)
```

Output:

	Input	Expected	Got	
✓	A&B	B&A	B&A	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 1.00/1.00.