

Alphabetical Substrings

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Week 2 > Problem Set 1 > Problem 3: Alphabetical Substrings

(15/15 points)

Assume `s` is a string of lower case characters.

Write a program that prints the longest substring of `s` in which the letters occur in alphabetical order. For example, if `s = 'azcbobobegghakl'`, then your program should print

```
Longest substring in alphabetical order is: beggh
```

In the case of ties, print the first substring. For example, if `s = 'abcbcd'`, then your program should print

```
Longest substring in alphabetical order is: abc
```

For problems such as these, do not include `raw_input` statements or define the variable `s` in any way. Our automated testing will provide a value of `s` for you - so the code you submit in the following box should assume `s` is already defined. If you are confused by this instruction, please review L4 Problems 10 and 11 before you begin this problem set.

Note: This problem is fairly challenging. We encourage you to work smart. If you've spent more than a few hours on this problem, we suggest that you move on to a different part of the course. If you have time, come back to this problem after you've had a break and cleared your head.

`s = 'wcebckxcszbluqua'`

Output:

```
Longest substring in alphabetical order is: bckx
```

`s = 'kronnroi'`

Output:

```
Longest substring in alphabetical order is: nnr
```

`s = 'rikawxdywxivnnueo'`

Output:

```
Longest substring in alphabetical order is: awx
```

`s = 'wzrevqyncqugpwqwunbbxg'`

Output:

Longest substring in alphabetical order is: cqu

s = 'gykbazezlmakd'

Output:

Longest substring in alphabetical order is: gy

s = 'xpsfziwkkitysvdbok'

Output:

Longest substring in alphabetical order is: ity

s = 'swgxqaoitfcgydvlw'

Output:

Longest substring in alphabetical order is: cgy

s = 'abcdefghijklmnopqrstuvwxyz'

Output:

Longest substring in alphabetical order is: abcdefghijklmnopqrstuvwxyz

s = 'swnobryvbcrxyw'

Output:

Longest substring in alphabetical order is: bcrxy

s = 'yedxjwwypxopusrxrj'

Output:

Longest substring in alphabetical order is: jwwy

s = 'unjtxkoam'

Output:

Longest substring in alphabetical order is: jtx

s = 'zyxwvutsrqponmlkjihgfedcba'

Output:

Longest substring in alphabetical order is: z

s = 'pirmdhcboms'

Output:

Longest substring in alphabetical order is: ir

s = 'vbkzrukvnwzwtltzdebs'

Output:

Longest substring in alphabetical order is: bkz

s = 'qoqfjzmqarhkgl'

Output:

Longest substring in alphabetical order is: fjz

s = 'klvmjzufmsrvubdscl'

Output:

Longest substring in alphabetical order is: klv

s = 'cnvregkvf'

Output:

Longest substring in alphabetical order is: egkv

s = 'imgatemovpftthcufsoquire'

Output:

Longest substring in alphabetical order is: emov

s = 'dkpwvgjnbu'

Output:

Longest substring in alphabetical order is: dkpw

s = 'niziuzzeqpvгии'

Output:

Longest substring in alphabetical order is: iuzz