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## Problem 3

### Problem 3

12/15 points (graded)

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
```

Note: This problem may be 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.

```
1 #s='azcbobobegghakl'
2 sub=''
```

```

5
6
7 for i in range(0,size,1):
8     sub=sub + s[i]
9     if len(sub)>len(long) :
10         long = sub
11     if s[i+1]<s[i] :
12         print(sub)
13         sub = ''
14 print ('Longest substring in alphabetical order is: ', long)

```

Press ESC then TAB or click outside of the code editor to exit

Incorrect

## Test results

[Hide output](#)

**INCORRECT**

s = 'qfdqqliqzzoqiighdkcw'

**Output:**

```

q
f
dq
dl
iqzz
oq
ii
gh
dk
Longest substring in alphabetical order is: iqzz

```

s = 'qewfjjzjdybwux'

Couldn't get auth token: undefined

```
q
ew
fjjz
j
dy
bw
```

Longest substring in alphabetical order is: fjjz

```
s = 'whteufkilzjmvffj'
```

**Output:**

```
w
ht
eu
fk
ilz
jmv
```

Longest substring in alphabetical order is: ilz

```
s = 'nfwlcxfajgbvkkjgazduum'
```

**Your output:**

```
n
fw
l
cx
f
aj
g
bv
kk
j
g
az
Longest substring in alphabetical order is: fw
```

```
*** ERROR: Expected 'duu', got 'fw'. ***
```

**Correct output:**

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

`s = 'qqtyjonvqmfxxpkpik'`

**Output:**

```
qqty
jo
nv
q
m
fx
qx
p
kp
Longest substring in alphabetical order is: qqty
```

`s = 'zgspmqckogupqkzqyafsrnws'`

```
z
gs
p
mq
cko
gu
pq
kz
qy
afs
r
Longest substring in alphabetical order is:  cko
```

s = 'jxltclwwdknygxaax'

**Output:**

```
jx
lt
clwww
dkny
gx
q
Longest substring in alphabetical order is:  clwww
```

s = 'abcdefghijklmnopqrstuvwxyz'

**Your output:**

```
Longest substring in alphabetical order is:
abcdefghijklmnopqrstuvwxyz
*** ERROR: Expected 'abcdefghijklmnopqrstuvwxyz', got
'abcdefghijklmnopqrstuvwxyz'. ***
```

**Correct output:**

Couldn't get auth token: undefined

Longest substring in alphabetical order is:  
abcdefghijklmnopqrstuvwxyz

s = 'hzqjhzfvutxkyxnuagq'

**Your output:**

```
hz
q
j
hz
fv
u
tx
ky
x
nu
Longest substring in alphabetical order is: hz

*** ERROR: Expected 'agq', got 'hz'. ***
```

**Correct output:**

Longest substring in alphabetical order is: agq

s = 'glavkemvwyzlxbhdx'

**Output:**

```
gl
av
k
emvwyz
lx
j
bh
```

`s = 'xckcxrmson'`

**Output:**

```
x
ck
cx
r
ms
Longest substring in alphabetical order is:  ck
```

`s = 'zyxwvutsrqponmlkjihgfedcba'`

**Output:**

z  
y  
x  
w  
v  
u  
t  
s  
r  
q  
p  
o  
n  
m  
l  
k  
j  
i  
h  
g  
f  
e  
d  
c

Longest substring in alphabetical order is: z

s = 'bmlhgorbh'

**Output:**

bm  
l  
h  
gor

Longest substring in alphabetical order is: gor

s = 'bmfjievbcbywcgfffcimj'



```
bm
fj
i
eqv
bc
by
w
cg
fq
ff
Longest substring in alphabetical order is: eqv
```

s = 'mxaawwjhdme'

**Output:**

```
mx
aaww
j
h
Longest substring in alphabetical order is: aaww
```

s = 'iupalzgeiqdbld'

**Output:**

```
iu
p
alz
g
eiq
d
Longest substring in alphabetical order is: alz
```

**Output:**

```
q
mu
q
aeo
jy
agl
jp
ox
Longest substring in alphabetical order is: aeo
```

`s = 'julxfvrmaks'`

**Your output:**

```
ju
lx
j
fv
r
m
Longest substring in alphabetical order is: ju

*** ERROR: Expected 'aks', got 'ju'. ***
```

**Correct output:**

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

`s = 'uslbaqvajayadnctsojpor'`

**Output:**

```
u
s
l
b
aqv
aj
ay
adn
ct
s
o
jp
Longest substring in alphabetical order is:  aqv
```

```
s = 'psmkcn gliunpclsoggzawgb'
```

**Output:**

```
ps
m
k
cn
gl
iu
np
cls
o
ggz
aw
Longest substring in alphabetical order is:  cls
```

[Hide output](#)

### Important

Only hit "Submit" once per submission. You only get 30 checks per problem.

If you believe you have correct code but it is marked incorrect after clicking "Check"...

\*\* After you submit your code, you can see every test case the graders runs on your code. They compare what your code outputs with what our answer code is supposed to output. Click the small link titled "See Full Output" below the Test Results header.

"Staff Debug: L397 Error" means your code has an infinite loop...

Do not define your own values

\*\* For problems such as these, do not include `input` statements or define variables we told you would be given. Our automated testing will provide values for you - so write your code in the following box assuming those variables are already defined.

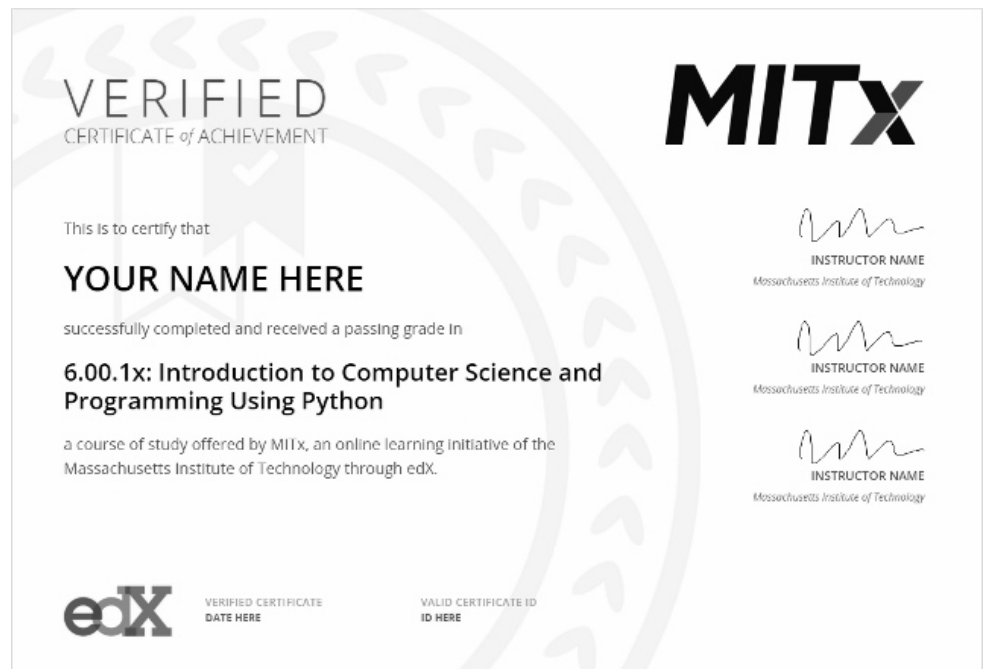
Submit

You have used 4 of 30 attempts

✖ Incorrect (12/15 points)

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# Problem 3

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Topic: Problem Set 1 / Problem 3

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- ? [i got a different result submitting my code to Spyder \(Anaconda\) on my pc and here on the site...what should i do?](#) 11  
[hi everybody and thanks for reading me! :\) i am trying to solve this problem: "Problem 3 Assume s is a...](#)
- ? [problem](#) 1  
[Actually the due date was 21 st and I have one left so can I do it by today because it says it was 5 as p...](#)
- ? [Grader Issue](#) 1  
[So, I was tinkering with my code and managed to submit an answer that graded 13.5. I then made so...](#)

Couldn't get auth token: undefined



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