



String Validators

by DOSHI

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Python has built-in string validation methods for basic data. It can check if a string is composed of alphabetical characters, alphanumeric characters, digits, etc.

`str.isalnum()`

This method checks if all the characters of a string are alphanumeric (*a-z, A-Z and 0-9*).

```
>>> print 'ab123'.isalnum()
True
>>> print 'ab123#'.isalnum()
False
```

`str.isalpha()`

This method checks if all the characters of a string are alphabetical (*a-z and A-Z*).

```
>>> print 'abcD'.isalpha()
True
>>> print 'abcd1'.isalpha()
False
```

`str.isdigit()`

This method checks if all the characters of a string are digits (*0-9*).

```
>>> print '1234'.isdigit()
True
>>> print '123edsd'.isdigit()
False
```

`str.islower()`

This method checks if all the characters of a string are lowercase characters (*a-z*).

```
>>> print 'abcd123#'.islower()
True
>>> print 'Abcd123#'.islower()
False
```

`str.isupper()`

This method checks if all the characters of a string are uppercase characters (*A-Z*).

```
>>> print 'ABCD123#'.isupper()
True
>>> print 'Abcd123#'.isupper()
False
```

Task

You are given a string *S*.

Your task is to find out if the string *S* contains: *alphanumeric characters*, *alphabetical characters*, *digits*, *lowercase* and *uppercase characters*.

Input Format

A single line containing a string S .

Constraints

$$0 < \text{len}(S) < 1000$$

Output Format

In the first line, print `True` if S has any *alphanumeric characters*. Otherwise, print `False`.

In the second line, print `True` if S has any *alphabetical characters*. Otherwise, print `False`.

In the third line, print `True` if S has any *digits*. Otherwise, print `False`.

In the fourth line, print `True` if S has any *lowercase characters*. Otherwise, print `False`.

In the fifth line, print `True` if S has any *uppercase characters*. Otherwise, print `False`.

Sample Input

```
qA2
```

Sample Output

```
True
True
True
True
True
```

[f](#) [t](#) [in](#)

Submissions: 10117


Max Score: 10


Difficulty: Easy

Rate This Challenge:

★★★★★ Thanks!

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Current Buffer (saved locally, editable)  

Python 2   

```
1 # Enter your code here. Read input from STDIN. Print output to STDOUT
2 str = raw_input()
3 l = len(str)
4 a = str[0].isalnum()
5 b = str[0].isalpha()
6 c = str[0].isdigit()
7 d = str[0].islower()
8 e = str[0].isupper()
9
10 for i in range(1,l):
11     a = a or str[i].isalnum()
12     b = b or str[i].isalpha()
13     c = c or str[i].isdigit()
14     d = d or str[i].islower()
15     e = e or str[i].isupper()
16 print(a)
17 print(b)
18 print(c)
19 print(d)
20 print(e)
```

Line: 20 Col: 9

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Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run you code against all the test cases.

Input (stdin)

```
qA2
```

Your Output (stdout)

```
True
True
True
True
True
```

Expected Output

```
True
True
True
True
True
```

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