String Validators

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 \boldsymbol{S} .

Constraints

0 < 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 O	utput			
True True				
True True				
True				