

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
```