Capital or Small or Digit

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Given a letter X. Determine whether X is Digit or Alphabet and if it is Alphabet determine if it is **Capital Case** or **Small Case**.

Note:

- Digits in ASCII '0' = 48,'1' = 49 ....etc

- Capital letters in ASCII 'A' = 65, 'B' = 66 ....etc

- Small letters in ASCII 'a' = 97,'b' = 98 ....etc

Input

Only one line containing a character X which will be a capital or small letter or digit.

Output

Print a single line contains "**IS DIGIT**" if X is **digit** otherwise, print "**ALPHA**" in the first line followed by a new line that contains "**IS CAPITAL**" if X is a **capital** letter and "**IS SMALL**" if X is a **small letter**.

Examples

standard input	standard output
A	ALPHA IS CAPITAL
9	IS DIGIT
a	ALPHA IS SMALL

Note

** recommended to read this to know more about ASCII Code `https://www.javatpoint.com/ascii`.