

Boss Attack 2-2

Table

Summary:

Please use lex to read an input file which contains words, IP addresses, and email addresses and then print the output as follows.

Description:

This task requires you to use several complex regular expressions to scan IP addresses, email addresses, and words. When a token is matched, you should output the tokens according to the examples below.

Table I shows a list of tokens your program need to recognize.

Name	Descriptions	Examples
Word	A word is a string composed by English letters A-Z or a-z but first letter must be capital.	Apple (valid) A (valid) a (invalid) ABC (valid) NcU (valid)
IP Address	Internet IP address format. Note the each integer in an IP address is between 0..255.	0.0.0.0(valid) 255.255.255.255 (valid) 1.100.50.0001 (invalid)
Email Address	Email address format. A word is composed by characters in a..z,A..Z,0..9. The left hand side of "@" can contain a word. The right hand side of "@" can contain at least two words where a "." must be inserted between two words. A "." may not appear at the end of an email address or after "@".	oolab@cc.ncu.edu.tw(valid) abc@qwe.xyz (valid) 0436abc@i8w28.com(valid) Aq_23\$@www.com(invalid) xxx@ncu.edu. (invalid) ooo@.ncu.edu (invalid)

Example #: Suppose we have the input file

```
Short
long
Beautiful
140.115.53.32
0.1.2.3
255.256.257.258
1.100.50.0001
oolab@cc.ncu.edu.tw
007@abc
@abc@
```

When pattern is matched, print it out below:

```
Short is a word
Beautiful is a word
140.115.53.32 is an IP address
0.1.2.3 is an IP address
oolab@cc.ncu.edu.tw is an email address
```