

## 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)
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)

**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
```