Please write a program to read a program source following the token definition and grammar rule at right, with stdin be the input.

Your program has to check the source if it follow the token and grammar rules. If yes, please print the tokens' type and themselves. If not, print "valid input"

Terminal	Regular Expression
id	[a-z]
assign	"="
inum	$[0-9]^+$

1.	Proc	$\rightarrow$	Stmt $
2.	Stmt	$\rightarrow$	id assign Val
3.	Val	$\rightarrow$	id
4.		|	inum

Sample Input 1

a = 70

Sample Output 1

id a
assign =
inum 70

Sample Input 2

aa = 5.1

Sample Output 2

valid input