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
strdcl	s
id	[a-o|q|r|t-z]
quote	"\""
string	[a-z|A-Z|0-9]*
print	p

1. Proc	→	Dcl Stmt $
2. Dcl	→	strdcl id Astring
3. Astring	→	quote string quote
4. Stmt	→	print id

Sample Input 1
s a "g6hf "
p a

Sample Output 1
strdcl s
id a
quote "
string g6hf
quote "
print p
id a

Sample Input 2
s b(23fg)

Sample Output 2
valid input