

Please write a program to read a program source from **stdin** following the token definition and grammar rule.

Your program has to check the source whether it follows the token definition and grammar rules or not.

If **Yes**, print “**valid**” with a **newline**.

If **No**, print “**error**” with a **newline**.

Sample Input 1

((()))

Sample Output 1

valid

Sample Input 2

{{()}}

Sample Output 2

valid

Sample Input 3

((()))[]{}{}}

Sample Output 3

valid

Sample Input 4

{{{}}

Sample Output 4

error

Sample Input 5

{{{

Sample Output 5

error

Sample Input 6

{{{ [] () () []
[] [] [] () [] }

Sample Output 6

valid

Terminal	Regular Expression
LPH	\(
RPH	\)
LBR	\[
RBR	\]
LCB	\{
RCB	\}
<i>(ignore)</i>	[\t\r\n]
<i>all other char should be treated as error</i>	

Productions	
1	program → exprs
2	exprs → expr exprs
3	exprs → λ
4	expr → LPH exprs RPH
5	expr → LBR exprs RBR
6	expr → LCB exprs RCB