Consider a game for two players playing alternatively. Both players show a certain number of fingers in each hand. Let \( X \) be the player that moves next, and let \( Y \) be the other player. Let \( a \) and \( b \) be the number of fingers shown by \( X \), and let \( c \) and \( d \) be the number of fingers shown by \( Y \). In each turn, these are the allowed moves:

1. Add mod 5 as many fingers as \( X \) has in a non-empty hand (a hand showing at least one finger) to one of \( Y \)'s non-empty hands. That is:
   
   \[
   \begin{align*}
   (a,b)(c,d) &\rightarrow (a,b)(c+a,d) \quad \text{if } a,c \neq 0 \\
   (a,b)(c,d) &\rightarrow (a,b)(c,d+a) \quad \text{if } a,d \neq 0 \\
   (a,b)(c,d) &\rightarrow (a,b)(c+b,d) \quad \text{if } b,c \neq 0 \\
   (a,b)(c,d) &\rightarrow (a,b)(c,d+b) \quad \text{if } b,d \neq 0 
   \end{align*}
   \]

2. “Move” the fingers in one of \( X \)'s hands to the other hand, provided that none of them are empty. Again, the operations are made mod 5:
   
   \[
   \begin{align*}
   (a,b)(c,d) &\rightarrow (a+b,0)(c,d) \quad \text{if } a,b \neq 0 \\
   (a,b)(c,d) &\rightarrow (0,a+b)(c,d) \quad \text{if } a,b \neq 0 
   \end{align*}
   \]

3. “Redistribute” the fingers in \( X \)'s hands, if one of them is empty:
   
   \[
   \begin{align*}
   (a,0)(c,d) &\rightarrow (x,y)(c,d) \quad \text{if } x+y = a \text{ and } 0 < x,y < a \\
   (0,b)(c,d) &\rightarrow (x,y)(c,d) \quad \text{if } x+y = b \text{ and } 0 < x,y < b 
   \end{align*}
   \]

Both players play perfectly. The first player to get to \((0,0)\) loses the game. A game that never ends is considered to be a draw.

### Input

Input consists of several cases, each one with \( a, b, c \) and \( d \), all between 0 and 4. Assume \( a+b > 0 \) and \( c+d > 0 \).

### Output

For every case, tell if \( X \) will win, if \( X \) will lose, or if the game is a draw.

<table>
<thead>
<tr>
<th>Sample input</th>
<th>Sample output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 4 0 3</td>
<td>WIN</td>
</tr>
<tr>
<td>1 0 4 0</td>
<td>WIN</td>
</tr>
<tr>
<td>0 1 0 1</td>
<td>LOSE</td>
</tr>
<tr>
<td>3 0 2 3</td>
<td>LOSE</td>
</tr>
<tr>
<td>3 3 0 4</td>
<td>DRAW</td>
</tr>
<tr>
<td>1 1 1 1</td>
<td>DRAW</td>
</tr>
</tbody>
</table>