1. last = '0';  
2. penultimate = '0';  
3. c = nextCharInput();  
4. Print("No Good.");  
5. last = c;  
6. c = nextCharInput();  
7. Print("No Good.");  
8. penultimate = last;  
9. last = c;  
10. c = nextCharInput();  
11. if (penultimate != last && last == c)  
    Print("OK")  
    else Print("No Good.");  
12. GOTO 10;

C is a temp variable.

At 3, 6, 10: What determines next message?
Need: nextChar, last, penultimate

Lecture 17: input: string of 0s and 1s.
Rejets: 0, 1, 00, 01, 10, 11
Allow: xxy-----abc

Good:
10011 110100
11101 111100

Bad:
10111 1
110010

Chomsky

Program Counter
<table>
<thead>
<tr>
<th>State</th>
<th>PC</th>
<th>randomize</th>
<th>last</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

"OK" means "ok".
F.S. A. (in a more common form)

\[
\begin{align*}
\text{State} &= \text{vertices.} \\
\text{Arcs with} & \text{ labels } 0 \text{ or } 1 \\
\text{out-degree} &= 2 \\
\text{on} & \text{ listed } 0 \\
\text{on} & \text{ listed } 1.
\end{align*}
\]

- start
- finish/accept (can have many of these)

\[
\begin{align*}
L &= \{ \text{11, 11*}, 11**}, \cdots \\\n& \quad \{0101, 0101+\}, \cdots
\end{align*}
\]

L is the language of words with at least two ones.

Page 3
\( O = \text{acceptance state} \)