1.1.  

1.2. Word Ale

1. Start

2. Read A

3. Read l

4. Read e

The state is p, it is final, so Ale is accepted.
1. Start

2. Read α

3. Read l

4. Read e

5. Read 1

We end up in the state e which is not final, so the word alel is not accepted.
1.3 \( Q = \{ s, p, e \} \)
\( \Sigma = \{ 0, 1, \alpha, A \} \)

\[ \delta: \]

<table>
<thead>
<tr>
<th></th>
<th>s</th>
<th>p</th>
<th>e</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>e</td>
<td>e</td>
<td>e</td>
</tr>
<tr>
<td>1</td>
<td>e</td>
<td>e</td>
<td>e</td>
</tr>
<tr>
<td>( \alpha )</td>
<td>e</td>
<td>p</td>
<td>e</td>
</tr>
<tr>
<td>A</td>
<td>p</td>
<td>e</td>
<td>e</td>
</tr>
</tbody>
</table>

\( q_0 = s \)
\( F = \{ p \} \)

1.4 Automaton B: