1) Consider the following grammar:

\[
S \rightarrow i\ C\ t\ S\ S' \mid a
\]

\[
S' \rightarrow e\ S \mid \varepsilon
\]

\[
C \rightarrow b
\]

Where \{S, C, S'\} are non terminals with S as the start symbol. The rest are terminals.

Construct an LL(1) Table for this grammar.

Note: You must first compute the first and the follow of each nonterminal.

First (C) = \{b\}, First(S') = \{e, \varepsilon\}, First(S) = \{i, a\}

Follow (S') = Follow(S) = \{e, \varepsilon\} Follow (C) = \{t\}

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>e</th>
<th>i</th>
<th>t</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>S→ a</td>
<td></td>
<td>S→ iCt S'</td>
<td></td>
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</tr>
<tr>
<td>S'</td>
<td></td>
<td>S'→ eS</td>
<td>S'→ ε</td>
<td>S'→ ε</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>C→ b</td>
<td></td>
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