<table>
<tr><th>Step</th><th>Annotated Algorithm: $B := L^{-1}B$</th></tr>
<tr><td>1a</td><td>$\left\{ B = \hat{B} \right\}$</td></tr>
<tr><td>4</td><td>Partition $L \rightarrow \left(\begin{array}{c||c} L_{TL} & 0 \\ \hline\hline L_{BL} & L_{BR} \end{array}\right)$, $B \rightarrow \left(\begin{array}{c} B_T \\ \hline\hline B_B \end{array}\right)$ and $\hat{B} \rightarrow \left(\begin{array}{c} \hat{B}_T \\ \hline\hline \hat{B}_B \end{array}\right)$
where L_{TL} is 0×0, and B_T and $\hat{B}_T$ have 0 rows</td></tr>
<tr><td>2</td><td>$\left\{ \left(\begin{array}{c} B_T \\ \hline\hline B_B \end{array}\right) = \left(\begin{array}{c} {L_{TL}}^{-1}\hat{B}_T \\ \hline\hline \hat{B}_B - L_{BL}({L_{TL}}^{-1}\hat{B}_T) \end{array}\right) \right\}$</td></tr>
<tr><td>3</td><td>while $m(L_{TL}) \neq m(L)$ do</td></tr>
<tr><td>2,3</td><td>$\left\{ \left(\left(\begin{array}{c} B_T \\ \hline\hline B_B \end{array}\right) = \left(\begin{array}{c} {L_{TL}}^{-1}\hat{B}_T \\ \hline\hline \hat{B}_B - L_{BL}({L_{TL}}^{-1}\hat{B}_T) \end{array}\right) \right) \wedge (m(L_{TL}) \neq m(L)) \right\}$</td></tr>
<tr><td>5a</td><td>Repartition
$\left(\begin{array}{c||c} L_{TL} & 0 \\ \hline\hline L_{BL} & L_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c||c|c} L_{00} & 0 & 0 \\ \hline\hline l_{10}^T & \lambda_{11} & 0 \\ \hline L_{20} & l_{21} & L_{22} \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline\hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ \hline\hline b_1^T \\ \hline B_2 \end{array}\right)$, and
$\left(\begin{array}{c} \hat{B}_T \\ \hline\hline \hat{B}_B \end{array}\right) \rightarrow \left(\begin{array}{c} \hat{B}_0 \\ \hline\hline \hat{b}_1^T \\ \hline \hat{B}_2 \end{array}\right)$
where b_1^T and $\hat{b}_1^T$ are rows and λ_{11} is a scalar</td></tr>
<tr><td>6</td><td>$\left\{ \left(\begin{array}{c} B_0 \\ \hline\hline b_1^T \\ \hline B_2 \end{array}\right) = \left(\begin{array}{c} L_{00}^{-1}\hat{B}_0 \\ \hline\hline \hat{b}_1^T - \hat{l}_{10}^T L_{00}^{-1}\hat{B}_0 \\ \hline \hat{B}_2 - \hat{L}_{20}L_{00}^{-1}\hat{B}_0 \end{array}\right). \right\}$</td></tr>
<tr><td>8</td><td>$b_1^T := b_1^T/\lambda_{11}$
$B_2 := B_2 - l_{21}b_1^T$</td></tr>
<tr><td>5b</td><td>Continue with
$\left(\begin{array}{c||c} L_{TL} & 0 \\ \hline\hline L_{BL} & L_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c|c||c} L_{00} & 0 & 0 \\ \hline l_{10}^T & \lambda_{11} & 0 \\ \hline\hline L_{20} & l_{21} & L_{22} \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline\hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ \hline\hline B_2 \end{array}\right)$, and
$\left(\begin{array}{c} \hat{B}_T \\ \hline\hline \hat{B}_B \end{array}\right) \leftarrow \left(\begin{array}{c} \hat{B}_0 \\ \hline \hat{b}_1^T \\ \hline\hline \hat{B}_2 \end{array}\right)$</td></tr>
<tr><td>7</td><td>$\left\{ \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ \hline\hline B_2 \end{array}\right) = \left(\begin{array}{c} L_{00}^{-1}\hat{B}_0 \\ \hline \lambda_{11}^{-1}(\hat{b}_1^T - l_{10}^T L_{00}^{-1}\hat{B}_0) \\ \hline\hline \hat{B}_2 - L_{20}L_{00}^{-1}\hat{B}_0 - l_{21}\lambda_{11}^{-1}(\hat{b}_1^T - l_{10}^T L_{00}^{-1}\hat{B}_0) \end{array}\right). \right\}$</td></tr>
<tr><td>2</td><td>$\left\{ \left(\begin{array}{c} B_T \\ \hline\hline B_B \end{array}\right) = \left(\begin{array}{c} {L_{TL}}^{-1}\hat{B}_T \\ \hline\hline \hat{B}_B - L_{BL}({L_{TL}}^{-1}\hat{B}_T) \end{array}\right) \right\}$</td></tr>
<tr><td></td><td>enddo</td></tr>
<tr><td>2,3</td><td>$\left\{ \left(\left(\begin{array}{c} B_T \\ \hline\hline B_B \end{array}\right) = \left(\begin{array}{c} {L_{TL}}^{-1}\hat{B}_T \\ \hline\hline \hat{B}_B - L_{BL}({L_{TL}}^{-1}\hat{B}_T) \end{array}\right) \right) \wedge \neg (m(L_{TL}) \neq m(L)) \right\}$</td></tr>
<tr><td>1b</td><td>$\left\{ B = L^{-1}\hat{B} \right\}$</td></tr>
</table>

Figure 6: Worksheet for deriving unblocked algorithm for $B := L^{-1}B$ (Variant 2).