Step	Algorithm: $C := AB^T + BA^T + C$
1a	$\{C = \widehat{C}\}$
4	$C \to \begin{pmatrix} C_{TL} & * \\ C_{BL} & C_{BR} \end{pmatrix}, A \to \begin{pmatrix} A_T \\ A_B \end{pmatrix}, B \to \begin{pmatrix} B_T \\ B_B \end{pmatrix}$ where C_{BR} is 0×0 , A_B and B_B have 0 rows
2	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right)$
3	while $m(C_{BR}) < m(C)$ do
2,3	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge m(C_{BR}) < m(C)$
5a	$ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \to \left(\begin{array}{c c} C_{00} & * & * \\ \hline c_{10}^T & \gamma_{11} & * \\ \hline C_{20} & c_{21} & C_{22} \end{array}\right), \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \to \left(\begin{array}{c c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right), \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \to \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ \hline B_2 \end{array}\right) $ where γ_{11} is 1×1 , a_1 and b_1 have 1 row
6	$ \left\{ \begin{pmatrix} C_{00} & * & * \\ c_{10}^T & \gamma_{11} & * \\ C_{20} & c_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} C_{00} & * & * \\ c_{10}^T & \gamma_{11} & * \\ C_{20} & c_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{pmatrix} $
8	$\gamma_{11} := a_1^T b_1 + b_1^T a_1 + \gamma_{11}$ $c_{21} := A_2 b_1 + B_2 a_1 + c_{21}$
7	$ \left\{ \begin{pmatrix} C_{00} & * & * \\ c_{10}^T & \gamma_{11} & * \\ C_{20} & c_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} C_{00} & * & * \\ c_{10}^T & a_1^T b_1 + b_1^T a_1 + \widehat{\gamma}_{11} & * \\ C_{20} & A_2 b_1 + B_2 a_1 + \widehat{c}_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{pmatrix} \right\} $
5b	$\begin{pmatrix} C_{00} & * & * \end{pmatrix} \begin{pmatrix} A_{0} & A_{0} \end{pmatrix} \begin{pmatrix} B_{0} \end{pmatrix}$
2	$ \left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) $
	endwhile
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \land \neg (m(C_{BR}) < m(C))$
1b	$\{C := AB^T + BA^T + \widehat{C}.$

Step	Algorithm: $C := AB^T + BA^T + C$	
1a	{	}
4	where	
2		
3	while do	,
2,3		
5a	where	
6		
8		
7		
5b		
2		$\bigg\}$
	endwhile	
2,3	$\bigg\{ \qquad \qquad \land \neg ($	
1b	{	}

Step	Algorithm: $C := AB^T + BA^T$	+C		
1a	${C = \widehat{C}}$			}
4	1			
2	where			}
3	while do			
2,3		\wedge		$\bigg\}$
5a	where			
6				$\bigg\}$
8				
7				
5b				
2				$\bigg\}$
	endwhile			
2,3		$\land \neg ($)	$\Big\}$
1b	$\{C := AB^T + BA^T + \widehat{C}.$			}

Step	Algorithm: $C := AB^T + BA^T + C$
1a	$\{C = \widehat{C}$
4	where
2	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right)$
3	while do
2,3	$ \left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge $
5a	where
6	
8	
7	
5b	
2	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right)$
	endwhile
2,3	$ \left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \land \neg () $
1b	$\left\{ C := AB^T + BA^T + \widehat{C}. \right\}$

Step	Algorithm: $C := AB^T + BA^T + C$
1a	${C = \widehat{C}}$
4	where
2	$\left\{ \begin{pmatrix} C_{TL} & * \\ C_{BL} & C_{BR} \end{pmatrix} = \begin{pmatrix} \widehat{C}_{TL} & * \\ \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{pmatrix} \right\}$
3	while $m(C_{BR}) < m(C)$ do
2,3	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge m(C_{BR}) < m(C)$
5a	where
6	
8	
7	
5b	
2	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right)$
	endwhile
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \land \neg (m(C_{BR}) < m(C)) \right\}$
1b	$\{C := AB^T + BA^T + \widehat{C}.$

Step	Algorithm: $C := AB^T + BA^T + C$
1a	${C = \widehat{C}}$
4	$C \to \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right), A \to \left(\begin{array}{c c} A_T \\ \hline A_B \end{array}\right), B \to \left(\begin{array}{c c} B_T \\ \hline B_B \end{array}\right)$ where C_{BR} is 0×0 , A_B and B_B have 0 rows
2	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) $
3	while $m(C_{BR}) < m(C)$ do
2,3	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge m(C_{BR}) < m(C) $
5a	where
6	
8	
7	
5b	
2	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right)$
	endwhile
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \land \neg (m(C_{BR}) < m(C)) \right\}$
1b	$\{C := AB^T + BA^T + \widehat{C}.$

Step	Algorithm: $C := AB^T + BA^T + C$	
1a	$\{C=\widehat{C}$	}
4	$C \to \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right), A \to \left(\begin{array}{c c} A_T \\ \hline A_B \end{array}\right), B \to \left(\begin{array}{c c} B_T \\ \hline B_B \end{array}\right)$ where C_{BR} is 0×0 , A_B and B_B have 0 rows	
2	$ \left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) $	
3	while $m(C_{BR}) < m(C)$ do	
2,3	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge m(C_{BR}) < m(C)$	$igg\}$
5a	$ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c c} C_{00} & * & * \\ \hline c_{10}^T & \gamma_{11} & * \\ \hline C_{20} & c_{21} & C_{22} \end{array}\right), \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right), \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ \hline B_2 \end{array}\right) $ where γ_{11} is 1×1 , a_1 and b_1 have 1 row	
6		$\left. \right\}$
8		
7		$\left \right\}$
5b	$ \left(\begin{array}{c c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c c c} C_{00} & * & * \\ \hline c_{10}^T & \gamma_{11} & * \\ \hline C_{20} & c_{21} & C_{22} \end{array}\right) , \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right) , \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ B_2 \end{array}\right) $	
2	$ \left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) $	igg
	endwhile	
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \land \neg (m(C_{BR}) < m(C))$	$igg\}$
1b	$\{C := AB^T + BA^T + \widehat{C}.$	}

$$\begin{array}{c} \text{Step} & \text{Algorithm: } C := AB^T + BA^T + C \\ 1 \text{a} & \{C = \widehat{C} \\ \\ 4 & C \rightarrow \left(\frac{C_{TL}}{C_{BL}} \middle| \frac{*}{C_{BL}} \middle| C_{BR} \right), \ A \rightarrow \left(\frac{A_T}{A_B}\right), \ B \rightarrow \left(\frac{B_T}{B_B}\right) \\ & \text{where } C_{BR} \text{ is } 0 \times 0, \ A_B \text{ and } B_B \text{ have } 0 \text{ rows} \\ 2 & \left\{\left(\frac{C_{TL}}{C_{BL}} \middle| \frac{*}{C_{BL}} \middle| C_{BR}\right) = \left(\frac{\widehat{C}_{TL}}{\widehat{C}_{BL}} \middle| \frac{*}{A_B B_B^T + B_B A_B^T + \widehat{C}_{BR}}\right) \right. \\ 3 & \text{while } m(C_{BR}) < m(C) \text{ do} \\ 2,3 & \left\{\left(\frac{C_{TL}}{C_{BL}} \middle| \frac{*}{C_{BR}} \middle| \frac{*}{\widehat{C}_{BL}} \middle| A_B B_B^T + B_B A_B^T + \widehat{C}_{BR}\right) \wedge m(C_{BR}) < m(C) \right. \\ 5 \text{a} & \left(\frac{C_{TL}}{C_{BL}} \middle| \frac{*}{C_{BR}} \middle| \frac{*}{\widehat{C}_{BL}} \middle| A_B B_B^T + B_B A_B^T + \widehat{C}_{BR}\right) \wedge m(C_{BR}) < m(C) \\ 5 \text{a} & \left(\frac{C_{TL}}{C_{BL}} \middle| \frac{*}{C_{BR}} \middle| \frac{*}{\widehat{C}_{BL}} \middle| A_B B_B^T + B_B A_B^T + \widehat{C}_{BR}\right) \wedge \frac{A_0}{a_1^T} , \left(\frac{B_T}{B_B}\right) \rightarrow \left(\frac{B_0}{b_1^T} \middle| \frac{B_1}{B_2}\right) \\ & \left(\frac{C_{D0}}{C_{BL}} \middle| C_{BR}\right) \rightarrow \left(\frac{C_{00}}{c_1^T} \middle| \frac{*}{A_1} \middle| A_1 \text{ and } b \text{ to row} \right) \\ 6 & \left\{\left(\frac{C_{TL}}{C_{BL}} \middle| \frac{*}{C_{BL}} \middle| A_1 \middle| A_1 \text{ and } b \text{ to row} \right) \\ & \left(\frac{C_{D0}}{C_{20}} \middle| C_{21} \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22}\right) \\ 8 & \\ 7 & \left\{\left(\frac{C_{TL}}{C_{BL}} \middle| \frac{*}{C_{BR}}\right) \leftarrow \left(\frac{C_{00}}{c_1^T} \middle| \frac{*}{A_1} \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_1 \middle| A_1 \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_2 B_2^T + B_2 A_2^T + \widehat{C}_{BR}\right) \\ & \left(\frac{B_0}{c_1^T} \middle| A_2 \middle| A_1 B_2 \middle| A_1 B_2 \middle| A_2 \middle| A_2 B_2 \middle| A_2 \middle| A_$$

$$\begin{array}{c} \text{Step} & \text{Algorithm: } C := AB^T + BA^T + C \\ 1a & \{C = \widehat{C} \\ \\ 4 & C \rightarrow \left(\frac{C_{TL}}{C_{BL}} \mid C_{BR}\right), \ A \rightarrow \left(\frac{A_T}{A_B}\right), \ B \rightarrow \left(\frac{B_T}{B_B}\right) \\ & \text{where } C_{BR} \text{ is } 0 \times 0, \ A_R \text{ and } B_R \text{ have } 0 \text{ rows} \\ 2 & \left\{\left(\frac{C_{TL}}{C_{BL}} \mid \frac{*}{C_{BR}}\right) = \left(\frac{\widehat{C}_{TL}}{\widehat{C}_{BL}} \mid A_B B_B^T + B_B A_B^T + \widehat{C}_{BR}\right) \\ 3 & \text{while } m(C_{BR}) < m(C) \text{ do} \\ 2.3 & \left\{\left(\frac{C_{TL}}{C_{BL}} \mid \frac{*}{C_{BR}}\right) = \left(\frac{\widehat{C}_{TL}}{\widehat{C}_{BL}} \mid A_B B_B^T + B_B A_B^T + \widehat{C}_{BR}\right) \wedge m(C_{BR}) < m(C) \\ 5a & \left(\frac{C_{TL}}{C_{BL}} \mid \frac{*}{C_{BR}}\right) \rightarrow \left(\frac{C_{00}}{\widehat{C}_{10}} \mid \frac{*}{N_1} \mid \frac{*}{N_1} \mid \frac{A_T}{A_B}\right) \rightarrow \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \rightarrow \left(\frac{B_0}{b_1^T}\right) \\ & \frac{B_1}{C_{20}} \mid \frac{B_1}{C_{21}} \mid \frac{B_1}{C_{20}} \mid \frac{B_1}{C_{20}}$$

Algorithm: $C := AB^T + BA^T + C$
$C \to \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right), A \to \left(\begin{array}{c c} A_T \\ \hline A_B \end{array}\right), B \to \left(\begin{array}{c c} B_T \\ \hline B_B \end{array}\right)$ where C_{BR} is 0×0 , A_B and B_B have 0 rows
while $m(C_{BR}) < m(C)$ do
$ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \to \left(\begin{array}{c c} C_{00} & * & * \\ \hline c_{10}^T & \gamma_{11} & * \\ \hline C_{20} & c_{21} & C_{22} \end{array}\right), \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \to \left(\begin{array}{c c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right), \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \to \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ \hline B_2 \end{array}\right) $ where γ_{11} is 1×1 , a_1 and b_1 have 1 row
$ \gamma_{11} := a_1^T b_1 + b_1^T a_1 + \gamma_{11} c_{21} := A_2 b_1 + B_2 a_1 + c_{21} $
$ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c c} C_{00} & * & * \\ \hline c_{10}^T & \gamma_{11} & * \\ \hline C_{20} & c_{21} & C_{22} \end{array}\right), \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c c} A_0 \\ \hline a_1^T \\ A_2 \end{array}\right), \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ B_2 \end{array}\right) $
endwhile

Algorithm: $C := AB^T + BA^T + C$

$$C o \left(\begin{array}{c|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) \,,\, A o \left(\begin{array}{c|c} A_T \\ \hline A_B \end{array} \right) \,,\, B o \left(\begin{array}{c|c} B_T \\ \hline B_B \end{array} \right)$$

where C_{BR} is 0×0 , A_B and B_B have 0 rows

while $m(C_{BR}) < m(C)$ do

$$\left(\begin{array}{c|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c|c} C_{00} & * & * \\ \hline c_{10}^T & \gamma_{11} & * \\ \hline C_{20} & c_{21} & C_{22} \end{array}\right) , \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right) , \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ \hline B_2 \end{array}\right)$$

where γ_{11} is 1×1 , a_1 and b_1 have 1 row

$$\gamma_{11} := a_1^T b_1 + b_1^T a_1 + \gamma_{11}$$

$$c_{21} := A_2 b_1 + B_2 a_1 + c_{21}$$

$$\left(\begin{array}{c|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c|c} C_{00} & * & * \\ \hline c_{10}^T & \gamma_{11} & * \\ C_{20} & c_{21} & C_{22} \end{array}\right) , \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c|c} A_0 \\ \hline a_1^T \\ A_2 \end{array}\right) , \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline b_1^T \\ B_2 \end{array}\right)$$

endwhile