Step	Algorithm: $C := AB^T + BA^T + C$
1a	$\{C = \widehat{C} \}$
4	$C \rightarrow \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right)$, $A \rightarrow \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right)$, $B \rightarrow \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right)$ where C_{BR} is 0×0, A_B and B_B have 0 rows
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \right\}$
3	while $m(C_{BR}) < m(C)$ do
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \wedge m(C_{BR}) < m(C) \right\}$
5a	**Determine block size b** $\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{cc\|c} C_{00} & * & * \\ C_{10} & C_{11} & * \\ \hline C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ A_1 \\ \hline A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ B_1 \\ \hline B_2 \end{array}\right)$ where C_{11} is $b \times b$, A_1 and B_1 have b row
6	$\left\{ \left(\begin{array}{ccc} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right) = \left(\begin{array}{ccc} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{array}\right) \right\}$
8	$C_{11} := A_1^T B_1 + B_1^T A_1 + \widehat{C}_{11}$ $C_{21} := A_2 B_1 + B_2 A_1 + \widehat{C}_{21}$
7	$\left\{ \left(\begin{array}{ccc} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right) = \left(\begin{array}{ccc} C_{00} & * & * \\ C_{10} & A_1^T B_1 + B_1^T A_1 + \widehat{C}_{11} & * \\ C_{20} & A_2 B_1 + B_2 A_1 + \widehat{C}_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{array}\right) \right\}$
5b	$\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c\|cc} C_{00} & * & * \\ \hline C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline A_1 \\ A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ B_2 \end{array}\right)$
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \right\}$
	endwhile
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \wedge \neg(m(C_{BR}) < m(C)) \right\}$
1b	$\{C := AB^T + BA^T + \widehat{C}.\}$

Step	Algorithm: $C := AB^T + BA^T + C$
1a	$\{ \quad \}$
4	where
2	$\left\{ \quad \right\}$
3	while do
2,3	$\left\{ \quad \wedge \quad \right\}$
5a	**Determine block size** b where
6	$\left\{ \quad \right\}$
8	
7	$\left\{ \quad \right\}$
5b	
2	$\left\{ \quad \right\}$
	endwhile
2,3	$\left\{ \quad \wedge \neg(\quad) \right\}$
1b	$\{ \quad \}$

Step	Algorithm: $C := AB^T + BA^T + C$
1a	$\{ {C = \widehat{C}} \}$
4	where
2	$\left\{ \right\}$
3	while do
2,3	$\left\{ \wedge \right\}$
5a	**Determine block size** b where
6	$\left\{ \right\}$
8	
7	$\left\{ \right\}$
5b	
2	$\left\{ \right\}$
	endwhile
2,3	$\left\{ \wedge \neg(\quad) \right\}$
1b	$\{ C := AB^T + BA^T + \widehat{C}. \}$

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

Step	Algorithm: $C := AB^T + BA^T + C$
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2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \right\}$
3	while $m(C_{BR}) < m(C)$ do
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge m(C_{BR}) < m(C) \right\}$
5a	**Determine block size** b where
6	$\left\{ \right\}$
8	
7	$\left\{ \right\}$
5b	
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \right\}$
	endwhile
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge \neg(m(C_{BR}) < m(C)) \right\}$
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Step	Algorithm: $C := AB^T + BA^T + C$
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5a	**Determine block size b** where
6	$\{ \}$
8	
7	$\{ \}$
5b	
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \right\}$
	endwhile
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge \neg (m(C_{BR}) < m(C)) \right\}$
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Step	Algorithm: $C := AB^T + BA^T + C$
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3	while $m(C_{BR}) < m(C)$ do
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5a	**Determine block size** b $\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) \rightarrow \left(\begin{array}{cc\|c} C_{00} & * & * \\ C_{10} & C_{11} & * \\ \hline C_{20} & C_{21} & C_{22} \end{array} \right), \left(\begin{array}{c} A_T \\ \hline A_B \end{array} \right) \rightarrow \left(\begin{array}{c} A_0 \\ A_1 \\ \hline A_2 \end{array} \right), \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \rightarrow \left(\begin{array}{c} B_0 \\ B_1 \\ \hline B_2 \end{array} \right)$ where C_{11} is $b \times b$, A_1 and B_1 have b row
6	$\{ \quad \}$
8	
7	$\{ \quad \}$
5b	$\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) \leftarrow \left(\begin{array}{c\|cc} C_{00} & * & * \\ \hline C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array} \right), \left(\begin{array}{c} A_T \\ \hline A_B \end{array} \right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline A_1 \\ A_2 \end{array} \right), \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ B_2 \end{array} \right)$
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \right\}$
	endwhile
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array} \right) \wedge \neg(m(C_{BR}) < m(C)) \right\}$
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2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \right\}$
3	while $m(C_{BR}) < m(C)$ do
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \wedge m(C_{BR}) < m(C) \right\}$
5a	**Determine block size** b $\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{cc\|c} C_{00} & * & * \\ C_{10} & C_{11} & * \\ \hline C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ A_1 \\ \hline A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ B_1 \\ \hline B_2 \end{array}\right)$ where C_{11} is $b \times b$, A_1 and B_1 have b row
6	$\left\{ \left(\begin{array}{ccc} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right) = \left(\begin{array}{ccc} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{array}\right) \right\}$
8	
7	$\{ \}$
5b	$\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c\|cc} C_{00} & * & * \\ \hline C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline A_1 \\ A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ B_2 \end{array}\right)$
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \right\}$
	endwhile
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \wedge \neg(m(C_{BR}) < m(C)) \right\}$
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5a	**Determine block size** b $\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{cc\|c} C_{00} & * & * \\ C_{10} & C_{11} & * \\ \hline C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ A_1 \\ \hline A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ B_1 \\ \hline B_2 \end{array}\right)$ where C_{11} is $b \times b$, A_1 and B_1 have b row
6	$\left\{ \begin{pmatrix} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{pmatrix} \right\}$
8	
7	$\left\{ \begin{pmatrix} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} C_{00} & * & * \\ C_{10} & A_1^T B_1 + B_1^T A_1 + \widehat{C}_{11} & * \\ C_{20} & A_2 B_1 + B_2 A_1 + \widehat{C}_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{pmatrix} \right\}$
5b	$\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c\|cc} C_{00} & * & * \\ \hline C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline A_1 \\ A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ B_2 \end{array}\right)$
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \right\}$
	endwhile
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \wedge \neg(m(C_{BR}) < m(C)) \right\}$
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Step	Algorithm: $C := AB^T + BA^T + C$
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2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \right\}$
3	while $m(C_{BR}) < m(C)$ do
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \wedge m(C_{BR}) < m(C) \right\}$
5a	**Determine block size b** $\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{cc\|c} C_{00} & * & * \\ C_{10} & C_{11} & * \\ \hline C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ A_1 \\ \hline A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ B_1 \\ \hline B_2 \end{array}\right)$ where C_{11} is $b \times b$, A_1 and B_1 have b row
6	$\left\{ \begin{pmatrix} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{pmatrix} \right\}$
8	$C_{11} := A_1^T B_1 + B_1^T A_1 + \widehat{C}_{11}$ $C_{21} := A_2 B_1 + B_2 A_1 + \widehat{C}_{21}$
7	$\left\{ \begin{pmatrix} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} C_{00} & * & * \\ C_{10} & A_1^T B_1 + B_1^T A_1 + \widehat{C}_{11} & * \\ C_{20} & A_2 B_1 + B_2 A_1 + \widehat{C}_{21} & A_2 B_2^T + B_2 A_2^T + \widehat{C}_{22} \end{pmatrix} \right\}$
5b	$\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c\|cc} C_{00} & * & * \\ \hline C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline A_1 \\ A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ B_2 \end{array}\right)$
2	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \right\}$
	endwhile
2,3	$\left\{ \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) = \left(\begin{array}{c\|c} \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & A_B B_B^T + B_B A_B^T + \widehat{C}_{BR} \end{array}\right) \wedge \neg(m(C_{BR}) < m(C)) \right\}$
1b	$\{C := AB^T + BA^T + \widehat{C}.\}$

	Algorithm: $C := AB^T + BA^T + C$
	$C \rightarrow \left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right)$, $A \rightarrow \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right)$, $B \rightarrow \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right)$ where C_{BR} is 0×0, A_B and B_B have 0 rows
	while $m(C_{BR}) < m(C)$ do
	Determine block size b $\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{cc\|c} C_{00} & * & * \\ C_{10} & C_{11} & * \\ \hline C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ A_1 \\ \hline A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ B_1 \\ \hline B_2 \end{array}\right)$ where C_{11} is $b \times b$, A_1 and B_1 have b row
	$C_{11} := A_1^T B_1 + B_1^T A_1 + \widehat{C}_{11}$ $C_{21} := A_2 B_1 + B_2 A_1 + \widehat{C}_{21}$
	$\left(\begin{array}{c\|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c\|cc} C_{00} & * & * \\ \hline C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right)$, $\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline A_1 \\ A_2 \end{array}\right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ B_2 \end{array}\right)$
	endwhile

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

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

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

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

Determine block size b

$$\left(\begin{array}{c|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \rightarrow \left(\begin{array}{cc|c} C_{00} & * & * \\ C_{10} & C_{11} & * \\ \hline C_{20} & C_{21} & C_{22} \end{array}\right), \; \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ A_1 \\ \hline A_2 \end{array}\right), \; \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \rightarrow \left(\begin{array}{c} B_0 \\ B_1 \\ \hline B_2 \end{array}\right)$$

where C_{11} is $b \times b$, A_1 and B_1 have b row

$C_{11} := A_1^T B_1 + B_1^T A_1 + \widehat{C}_{11}$

$C_{21} := A_2 B_1 + B_2 A_1 + \widehat{C}_{21}$

$$\left(\begin{array}{c|c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c|cc} C_{00} & * & * \\ \hline C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{array}\right), \; \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline A_1 \\ A_2 \end{array}\right), \; \left(\begin{array}{c} B_T \\ \hline B_B \end{array}\right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ B_2 \end{array}\right)$$

endwhile