Step	Algorithm: $C = AB^T + BA^T + \widehat{C}$
1a	${C = \hat{C}}$
4	$A o \left(\frac{A_T}{A_B}\right), B o \left(\frac{B_T}{B_B}\right), C o \left(\frac{C_{TL}}{C_{BL}}\right)$ where A_T has 0 rows, B_T has 0 rows, C_{TL} is $0 imes 0$
2	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right)$
3	while $m(C_{TL}) < m(C)$ do
2,3	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge m(C_{TL}) < m(C)$
5a	Determine block size b $ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \middle * \right) \to \left(\frac{C_{00}}{c_{10}} \middle * * \right) \\ \text{where } A_1 \text{ has } b \text{ rows, } B_1 \text{ has } b \text{ rows, } C_{11} \text{ is } b \times b $
6	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \widehat{C}_{00} & * & * \\ \widehat{C}_{10}^T & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $
8	$C_{11} = A_1^T (B_1^T)^T + B_1^T (A_1^T)^T + C_{11}$ $C_{10}^T = A_1 B_0^T + B_1^T A_0^T + C_{10}^T$
7	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \widehat{C}_{00} & * & * \\ A_1 B_0^T + B_1^T A_0^T + \widehat{C}_{10}^T & A_1^T (B_1^T)^T + B_1^T (A_1^T)^T + \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $
5b	$ \left(\frac{A_T}{A_B}\right) \leftarrow \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \leftarrow \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \middle \frac{*}{C_{BR}}\right) \leftarrow \left(\frac{C_{00} * * *}{c_{10}^T \gamma_{11}} \middle \frac{*}{c_{20}}\right) $
2	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right)$
	endwhile
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \land \neg (m(C_{TL}) < m(C))$
1b	$\left\{ C = AB^T + BA^T + \widehat{C} \right\}$

Algorithm: $C = AB^T + BA^T + C$		
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where		
while do		·
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endwhile		<i></i>
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	where while do Determine block size b where endwhile endwhile	where while do Determine block size b where

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

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

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

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

Step	Algorithm: $C = AB^T + BA^T + \widehat{C}$	
1a	${C = \widehat{C}}$	}
4	$A o \left(\frac{A_T}{A_B}\right), B o \left(\frac{B_T}{B_B}\right), C o \left(\frac{C_{TL}}{C_{BL}}\right)$ where A_T has 0 rows, B_T has 0 rows, C_{TL} is $0 imes 0$	
2	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right)$	
3	while $m(C_{TL}) < m(C)$ do	
2,3	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge m(C_{TL}) < m(C)$	$\left. \right\}$
5a	Determine block size b $ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \right * \\ C_{BL} C_{BR}\right) \to \left(\frac{C_{00}}{c_{10}} \right * * * \\ C_{20} c_{21} C_{22}\right) $ where A_1 has b rows, B_1 has b rows, C_{11} is $b \times b$	
6		$\left. \right\}$
8		
7		$\left. \begin{array}{c} \\ \end{array} \right\}$
5b	$\left(\frac{A_T}{A_B}\right) \leftarrow \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \leftarrow \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{B_2}\right) \leftarrow \left(\frac{C_{DL}}{C_{BL}}\right) \leftarrow \left(\frac{C_{00} * * *}{c_{10}^T \gamma_{11}} * \frac{*}{c_{20}}\right)$	
2	$ \left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) $	$\left. \right\}$
	endwhile	
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \land \neg (m(C_{TL}) < m(C))$	
1b	$\{C = AB^T + BA^T + \widehat{C}$	}

Step	Algorithm: $C = AB^T + BA^T + \widehat{C}$	
1a	$\{C=\widehat{C}$	}
4	$A \to \left(\frac{A_T}{A_B}\right), B \to \left(\frac{B_T}{B_B}\right), C \to \left(\frac{C_{TL}}{C_{BL}}\right)$ where A_T has 0 rows, B_T has 0 rows, C_{TL} is 0×0	
2	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right)$	$\left. \right\}$
3	while $m(C_{TL}) < m(C)$ do	
2,3	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge m(C_{TL}) < m(C)$	$\left. \right\}$
5a	Determine block size b $ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}}\right) \to \left(\frac{C_{00}}{c_{BR}}\right) \to \left(\frac{C_{00}}{c_{10}}\right) \times \left(\frac{C_{TL}}{c_{20}}\right) \times \left(\frac{C_{TL}}{c_{BL}}\right) \to \left(\frac{C_{00}}{c_{20}}\right) \times \left(\frac{C_{00}}{c_{21}}\right) \times \left(\frac{C_{TL}}{c_{20}}\right) \times $	
6	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \widehat{C}_{00} & * & * \\ \widehat{C}_{10}^T & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. ight\}$
8		
7		$\left. \begin{array}{c} \\ \end{array} \right\}$
5b	$\left(\frac{A_T}{A_B}\right) \leftarrow \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \leftarrow \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}}\right * \atop C_{BL} C_{BR}\right) \leftarrow \left(\frac{C_{00} * * *}{C_{10} \gamma_{11} *} \atop C_{20} c_{21} C_{22}\right)$	
2	$ \left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) $	
	endwhile	
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge \neg (m(C_{TL}) < m(C))$	
1b	$\{C = AB^T + BA^T + \widehat{C}$	}

Step	Algorithm: $C = AB^T + BA^T + \widehat{C}$	
1a	${C = \widehat{C}}$	}
4	$A o \left(\frac{A_T}{A_B}\right), B o \left(\frac{B_T}{B_B}\right), C o \left(\frac{C_{TL}}{C_{BL}}\right)$ where A_T has 0 rows, B_T has 0 rows, C_{TL} is $0 imes 0$	
2	$ \left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) $	igg
3	while $m(C_{TL}) < m(C)$ do	
2,3	$\left\{ \begin{array}{c c} \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge m(C_{TL}) < m(C)$	igg
	Determine block size b	
5a	$ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \right * \atop C_{BL} \mid C_{BR}\right) \to \left(\frac{C_{00}}{c_{10}} \right * \underset{C_{20}}{*} \mid c_{21} \mid C_{22}\right) $ where A has b rows B has b rows C is $b \times b$	
	where A_1 has b rows, B_1 has b rows, C_{11} is $b \times b$	_
6	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \widehat{C}_{00} & * & * \\ \widehat{C}_{10}^T & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. ight\}$
8		
7	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \widehat{C}_{00} & * & * \\ A_1 B_0^T + B_1^T A_0^T + \widehat{C}_{10}^T & A_1^T (B_1^T)^T + B_1^T (A_1^T)^T + \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. \begin{array}{c} \\ \end{array} \right\}$
5b	$\left(\frac{A_T}{A_B}\right) \leftarrow \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \leftarrow \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \middle \frac{*}{C_{BR}}\right) \leftarrow \left(\frac{C_{00} * * *}{c_{10}^T \gamma_{11}} \middle \frac{*}{c_{20}}\right)$	
2	$ \left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) $	igg
	endwhile	
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge \neg (m(C_{TL}) < m(C))$	$\bigg\}$
1b	$\{C = AB^T + BA^T + \widehat{C}$	}

Step	Algorithm: $C = AB^T + BA^T + \widehat{C}$	
1a	$\{C=\widehat{C}$	}
4	$A o \left(\frac{A_T}{A_B}\right), B o \left(\frac{B_T}{B_B}\right), C o \left(\frac{C_{TL}}{C_{BL}}\right)$ where A_T has 0 rows, B_T has 0 rows, C_{TL} is $0 imes 0$	
2	$ \left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) $	igg
3	while $m(C_{TL}) < m(C)$ do	
2,3	$ \left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge m(C_{TL}) < m(C) $	igg
	Determine block size b	
5a	$ \left(\begin{array}{c} A_T \\ \overline{A_B} \end{array}\right) \to \left(\begin{array}{c} A_0 \\ \overline{a_1^T} \\ A_2 \end{array}\right), \left(\begin{array}{c} B_T \\ \overline{B_B} \end{array}\right) \to \left(\begin{array}{c} B_0 \\ \overline{b_1^T} \\ B_2 \end{array}\right), \left(\begin{array}{c} C_{TL} & * \\ \overline{C_{BL}} & C_{BR} \end{array}\right) \to \left(\begin{array}{c} C_{00} & * & * \\ \overline{c_{10}^T} & \gamma_{11} & * \\ \overline{C_{20}} & c_{21} & C_{22} \end{array}\right) $	
	where A_1 has b rows, B_1 has b rows, C_{11} is $b \times b$	
6	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \widehat{C}_{00} & * & * \\ \widehat{C}_{10}^T & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	
8	$C_{11} = A_1^T (B_1^T)^T + B_1^T (A_1^T)^T + C_{11}$ $C_{10}^T = A_1 B_0^T + B_1^T A_0^T + C_{10}^T$	
7	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10}^T & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \widehat{C}_{00} & * & * \\ A_1 B_0^T + B_1^T A_0^T + \widehat{C}_{10}^T & A_1^T (B_1^T)^T + B_1^T (A_1^T)^T + \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. \begin{array}{c} \\ \end{array} \right\}$
5b	$\left(\frac{A_T}{A_B}\right) \leftarrow \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \leftarrow \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \middle \frac{*}{C_{BR}}\right) \leftarrow \left(\frac{C_{00}}{c_{10}} \middle \frac{*}{\gamma_{11}} \middle \frac{*}{\gamma_{12}}\right)$	
2	$\left\{ \begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right)$	$iggr \}$
	endwhile	
2,3	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge \neg (m(C_{TL}) < m(C))$	igg
1b	$\{C = AB^T + BA^T + \widehat{C}$	}

Algorithm: $C = AB^T + BA^T + \widehat{C}$
$A \to \left(\frac{A_T}{A_B}\right), B \to \left(\frac{B_T}{B_B}\right), C \to \left(\frac{C_{TL}}{C_{BL}}\right) \times \text{where } A_T \text{ has } 0 \text{ rows}, B_T \text{ has } 0 \text{ rows}, C_{TL} \text{ is } 0 \times 0$
while $m(C_{TL}) < m(C)$ do
Determine block size b
$ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \middle \frac{*}{C_{BR}}\right) \to \left(\frac{C_{00}}{c_{10}^T} \middle \frac{*}{\gamma_{11}} \middle $
$C_{11} = A_1^T (B_1^T)^T + B_1^T (A_1^T)^T + C_{11}$
$C_{10}^T = A_1 B_0^T + B_1^T A_0^T + C_{10}^T$
$\left(\frac{A_T}{A_B}\right) \leftarrow \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \leftarrow \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \middle \frac{*}{C_{BR}}\right) \leftarrow \left(\frac{C_{00}}{c_{10}} \middle \frac{*}{\gamma_{11}} \middle \frac{*}{\gamma_{12}}\right)$
endwhile

Algorithm: $C = AB^T + BA^T + \widehat{C}$

$$A o \left(\frac{A_T}{A_B}\right), B o \left(\frac{B_T}{B_B}\right), C o \left(\frac{C_{TL}}{C_{BL}}\right)$$

where A_T has 0 rows, B_T has 0 rows, C_{TL} is 0×0

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

Determine block size b

$$\left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{a_1^T}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{b_1^T}\right), \left(\frac{C_{TL}}{C_{BL}} \middle| * \atop C_{BL} \middle| C_{BR}\right) \to \left(\frac{C_{00}}{c_{10}^T} \middle| * \atop C_{20} \middle| c_{21} \middle| C_{22}\right)$$

where A_1 has b rows, B_1 has b rows, C_{11} is $b \times b$

$$C_{11} = A_1^T (B_1^T)^T + B_1^T (A_1^T)^T + C_{11}$$

$$C_{10}^T = A_1 B_0^T + B_1^T A_0^T + C_{10}^T$$

endwhile