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}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{C_{BL}} \mid * \atop C_{BL} \mid C_{BR}\right) \to \left(\frac{C_{00}}{C_{10}} \mid * \atop C_{20} \mid C_{21} \mid C_{22}\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} & 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} & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $
8	$C_{11} := A_1 B_1^T + B_1 A_1^T + C_{11}$ $C_{10} := A_1 B_0^T + B_1 A_0^T + C_{10}$
7	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10} & C_{11} & * \\ C_{20} & C_{21} & C_{22} \end{pmatrix} = \begin{pmatrix} A_0 B_0^T + B_0 A_0^T + \hat{C}_{00} & * & * \\ A_1 B_0^T + B_1 A_0^T + \hat{C}_{10} & A_1 B_1^T + B_1 A_1^T + \hat{C}_{11} & * \\ \hat{C}_{20} & \hat{C}_{21} & \hat{C}_{22} \end{pmatrix} $
5b	$ \left(\frac{A_T}{A_B}\right) \leftarrow \left(\frac{A_0}{A_1}\right), \left(\frac{B_T}{B_B}\right) \leftarrow \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{C_{BL}} \middle \frac{*}{C_{BR}}\right) \leftarrow \left(\frac{C_{00}}{C_{10}} \middle \frac{*}{C_{10}} \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	
1	
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	$A o \left(\frac{A_T}{A_B}\right), B o \left(\frac{B_T}{B_B}\right), C o \left(\frac{C_{TL}}{C_{BL}}\right) \times \frac{*}{C_{BL}}$ where A_T has 0 rows, B_T has 0 rows, C_{TL} is 0 × 0	
2	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right)$	
3	while $m(C_{TL}) < m(C)$ do	
2,3	$\left\{ \begin{array}{c c} \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge m(C_{TL}) < m(C)$	
5a	Determine block size b $ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{A_1}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{C_{BL}} \mid * \right) \to \left(\frac{C_{00}}{C_{10}} \mid * \right) \times \left(\frac{C_{10}}{C_{20}} \mid * \right) \times \left(\frac{C_{10}}{C_{20}} \mid * \right) \times \left(\frac{C_{20}}{C_{21}} \mid * \right) \times \left(C$	
6		
8		
7		
5b	$\langle A_2 \rangle \langle A_2 \rangle \langle B_2 \rangle \langle A_2 \rangle \langle C_{20} C_{21} C_{22} \rangle$	
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	$\{C = AB^T + BA^T + \widehat{C}$	}

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) $
5a	Determine block size b $ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{A_1}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{C_{BL}}\right) \times \left(\frac{C_{00}}{C_{00}}\right) \times \left(\frac{C_{00}}{C_{11}}\right) \times \left(\frac{C_{00}}{C_{20}}\right) \times \left(\frac{C_{00}}{C_{21}}\right) \times \left(\frac{C_{00}}{C_{20}}\right) \times \left(\frac{C_{00}}{C_{21}}\right) \times \left($
6	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10} & 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} & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $
8	
7	
5b	$\begin{pmatrix} A_B \end{pmatrix} \begin{pmatrix} A_2 \end{pmatrix} \begin{pmatrix} B_B \end{pmatrix} \begin{pmatrix} B_2 \end{pmatrix} \begin{pmatrix} C_{BL} & C_{BR} \end{pmatrix} \begin{pmatrix} C_{20} & C_{21} & C_{22} \end{pmatrix}$
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	$\{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) $	$\left. \right\}$
5a	Determine block size b $ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{A_1}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{C_{BL}} * \atop C_{BL} C_{BR}\right) \to \left(\frac{C_{00}}{C_{10}} * * \atop 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	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10} & 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} & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. \right\}$
8		
7	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10} & 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 A_0^T + \widehat{C}_{10} & A_1 B_1^T + B_1 A_1^T + \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. \begin{array}{c} \\ \end{array} \right\}$
5b	$\left(\begin{array}{c c}A_B\end{array}\right)$ $\left(\begin{array}{c}B_B\end{array}\right)$ $\left(\begin{array}{c}B_B\end{array}\right)$ $\left(\begin{array}{c}C_{BL}\end{array}\right)$ $\left(\begin{array}{c}C_{BR}\end{array}\right)$ $\left(\begin{array}{c}C_{20}\end{array}\right)$	
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	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge \neg (m(C_{TL}) < m(C))$	igg
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	$\left\{ \begin{array}{c c} \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge m(C_{TL}) < m(C)$	$\bigg\}$
	Determine block size b	
5a	$ \left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{A_1}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{C_{BL}}\right) \to \left(\frac{C_{00}}{C_{10}}\right) \times \left(\frac{C_{10}}{C_{11}}\right) \times \left(\frac{C_{10}}{C_{20}}\right) \times \left(\frac{C_{10}}{C_{21}}\right) \times \left(\frac{C_{10}}{C_{20}}\right) \times \left(\frac{C_{10}}{C_{21}}\right) \times \left(\frac{C_{10}}{C_{20}}\right) \times \left(\frac{C_{10}}{C_{21}}\right) \times \left(C$	
	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} & 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} & \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. ight\}$
8	$C_{11} := A_1 B_1^T + B_1 A_1^T + C_{11}$ $C_{10} := A_1 B_0^T + B_1 A_0^T + C_{10}$	
7	$ \begin{cases} \begin{pmatrix} C_{00} & * & * \\ C_{10} & 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 A_0^T + \widehat{C}_{10} & A_1 B_1^T + B_1 A_1^T + \widehat{C}_{11} & * \\ \widehat{C}_{20} & \widehat{C}_{21} & \widehat{C}_{22} \end{pmatrix} $	$\left. \begin{array}{c} \\ \end{array} \right\}$
5b	$\left(\begin{array}{c c} A_B \end{array}\right) \left(\begin{array}{c} \overline{A_2} \end{array}\right) \left(\begin{array}{c} B_B \end{array}\right) \left(\begin{array}{c} \overline{B_2} \end{array}\right) \left(\begin{array}{c c} C_{BL} \end{array}\right) \left(\begin{array}{c} C_{BR} \end{array}\right) \left(\begin{array}{c c} \overline{C_{20}} \end{array}\right)$	
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	$\left\{ \left(\begin{array}{c c} C_{TL} & * \\ \hline C_{BL} & C_{BR} \end{array} \right) = \left(\begin{array}{c c} A_T B_T^T + B_T A_T^T + \widehat{C}_{TL} & * \\ \hline \widehat{C}_{BL} & \widehat{C}_{BR} \end{array} \right) \wedge \neg (m(C_{TL}) < m(C))$	igg
1b	$\{C = AB^T + BA^T + \widehat{C}$	}

Algorithm: $C = AB^T + BA^T + \widehat{C}$
$A \to \left(\frac{A_T}{A_B}\right), B \to \left(\frac{B_T}{B_B}\right), C \to \left(\frac{C_{TL}}{C_{BL}}\right)^*$ 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}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{B_2}\right) \to \left(\frac{C_{00}}{C_{BL}}\right) \to \left(\frac{C_{00}}{C_{10}}\right) \times \left(\frac{C_{11}}{C_{20}}\right) \times \left(\frac{C_{20}}{C_{21}}\right) \times \left(C_{$
$C_{11} := A_1 B_1^T + B_1 A_1^T + C_{11}$ $C_{10} := A_1 B_0^T + B_1 A_0^T + C_{10}$
$\left(\frac{A_{T}}{A_{B}}\right) \leftarrow \left(\frac{A_{0}}{A_{1}}\right), \left(\frac{B_{T}}{B_{B}}\right) \leftarrow \left(\frac{B_{0}}{B_{1}}\right), \left(\frac{C_{TL}}{C_{BL}} \middle \frac{*}{C_{BR}}\right) \leftarrow \left(\frac{C_{00}}{C_{10}} \middle \frac{*}{C_{10}} \middle \frac{*}{C_{20}}\right)$
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

$$\left(\frac{A_T}{A_B}\right) \to \left(\frac{A_0}{A_1}\right), \left(\frac{B_T}{B_B}\right) \to \left(\frac{B_0}{B_1}\right), \left(\frac{C_{TL}}{C_{BL}} \mid x\right) \to \left(\frac{C_{00}}{C_{10}} \mid x\right) \times \left(\frac{C_{10}}{C_{20}} \mid C_{21} \mid x\right)$$

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

$$C_{11} := A_1 B_1^T + B_1 A_1^T + C_{11}$$

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

$$\left(\frac{A_{T}}{A_{B}}\right) \leftarrow \left(\frac{A_{0}}{A_{1}}\right), \left(\frac{B_{T}}{B_{B}}\right) \leftarrow \left(\frac{B_{0}}{B_{1}}\right), \left(\frac{C_{TL}}{C_{BL}} \middle| * \atop C_{BR}\right) \leftarrow \left(\frac{C_{00} * * * \\ C_{10} C_{11} * \\ C_{20} C_{21} C_{22}\right)$$

endwhile