Step	Algorithm: $[C] := \text{SYRK\_AC\_UNB\_VAR2}(A, C)$
1a	$\{C = \widehat{C}$ $\}$
4	$A \rightarrow \left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right)$ where A_T has 0 rows
2	$\{C = A_T^T A_T + \widehat{C}$ $\}$
3	while $m(A_T) < m(A)$ do
2,3	$\left\{ C = A_T^T A_T + \widehat{C} \wedge m(A_T) < m(A) \right\}$
5a	$\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \rightarrow \left(\begin{array}{c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right)$ where a_1 has 1 row
6	$\{ C = A_0^T A_0 + \widehat{C}$ $\}$
8	$C = a_1^T a_1 + C$
7	$\{ C = A_0^T A_0 + a_1^T a_1 + \widehat{C}$ $\}$
5b	$\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right)$
2	$\{ C = A_T^T A_T + \widehat{C}$ $\}$
	endwhile
2,3	$\{C = A_T^T A_T + \widehat{C} \wedge \neg(m(A_T) < m(A))$ $\}$
1b	$\{[C] = \text{syrk\_ac}(A, \widehat{C})$ $\}$

Step	Algorithm: $[C] := \text{SYRK\_AC\_UNB\_VAR2}(A, C)$
1a	$\{$ $\}$
4	where
2	$\{$ $\}$
3	while do
2,3	$\{$ $\wedge$ $\}$
5a	where
6	$\{$ $\}$
8	
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2	$\{$ $\}$
	endwhile
2,3	$\{$ $\wedge \neg($ $)$ $\}$
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3	while do
2,3	$\left\{ C = A_T^T A_T + \widehat{C} \wedge \right.$ $\left.\right\}$
5a	where
6	$\{$ $\}$
8	
7	$\{$ $\}$
5b	
2	$\{ C = A_T^T A_T + \widehat{C}$ $\}$
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8	
7	$\{$ $\}$
5b	$\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right)$
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	$C = a_1^T a_1 + C$
	$\left(\begin{array}{c} A_T \\ \hline A_B \end{array}\right) \leftarrow \left(\begin{array}{c} A_0 \\ \hline a_1^T \\ \hline A_2 \end{array}\right)$
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