Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}$ $\}$
4	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right)$, $B \rightarrow \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right)$ where A_R has 0 columns, B_B has 0 rows
2	$\{C = A_R B_B + \widehat{C}$ $\}$
3	while $n(A_R) < n(A)$ do
2,3	$\left\{ \quad C = A_R B_B + \widehat{C} \wedge n(A_R) < n(A) \right\}$
5a	**Determine block size** b $\left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \rightarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \rightarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$ where A_1 has b columns, B_1 has b rows
6	$\{ \quad C = A_2 B_2 + \widehat{C}$ $\}$
8	$C := A_1 B_1 + C$
7	$\{ \quad C = A_1 B_1 + A_2 B_2 + \widehat{C}$ $\}$
5b	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \leftarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$
2	$\{ \quad C = A_R B_B + \widehat{C}$ $\}$
	endwhile
2,3	$\{C = A_R B_B + \widehat{C} \wedge \neg(n(A_R) < n(A))$ $\}$
1b	$\{C = AB + \widehat{C})$ $\}$

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

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

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

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

Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}$ $\}$
4	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right)$, $B \rightarrow \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right)$ where A_R has 0 columns, B_B has 0 rows
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5a	**Determine block size** b $\left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \rightarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \rightarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$ where A_1 has b columns, B_1 has b rows
6	$\{$ $\}$
8	
7	$\{$ $\}$
5b	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \leftarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$
2	$\{ \quad C = A_R B_B + \widehat{C}$ $\}$
	endwhile
2,3	$\{C = A_R B_B + \widehat{C} \wedge \neg(n(A_R) < n(A))$ $\}$
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Step	Algorithm: $C := AB + C$
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6	$\{ \quad C = A_2 B_2 + \widehat{C}$ $\}$
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7	$\{$ $\}$
5b	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \leftarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$
2	$\{ \quad C = A_R B_B + \widehat{C}$ $\}$
	endwhile
2,3	$\{C = A_R B_B + \widehat{C} \wedge \neg(n(A_R) < n(A))$ $\}$
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6	$\{ \quad C = A_2 B_2 + \widehat{C}$ $\}$
8	
7	$\{ \quad C = A_1 B_1 + A_2 B_2 + \widehat{C}$ $\}$
5b	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \leftarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$
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	Algorithm: $C := AB + C$
	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right)$, $B \rightarrow \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right)$ where A_R has 0 columns, B_B has 0 rows
	while $n(A_R) < n(A)$ do
	Determine block size b $\left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \rightarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \rightarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$ where A_1 has b columns, B_1 has b rows
	$C := A_1 B_1 + C$
	$A \rightarrow \left(\begin{array}{c\|c} A_L & A_R \end{array} \right) \leftarrow \left(\begin{array}{c\|cc} A_0 & A_1 & A_2 \end{array} \right)$, $\left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$
	endwhile

Algorithm: $C := AB + C$

$$A \rightarrow \left(\begin{array}{c|c} A_L & A_R \end{array} \right), \; B \rightarrow \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right)$$

where A_R has 0 columns, B_B has 0 rows

while $n(A_R) < n(A)$ do

Determine block size b

$$\left(\begin{array}{c|c} A_L & A_R \end{array} \right) \rightarrow \left(\begin{array}{c|cc} A_0 & A_1 & A_2 \end{array} \right), \; \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \rightarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$$

where A_1 has b columns, B_1 has b rows

$C := A_1 B_1 + C$

$$A \rightarrow \left(\begin{array}{c|c} A_L & A_R \end{array} \right) \leftarrow \left(\begin{array}{c|cc} A_0 & A_1 & A_2 \end{array} \right), \; \left(\begin{array}{c} B_T \\ \hline B_B \end{array} \right) \leftarrow \left(\begin{array}{c} B_0 \\ \hline B_1 \\ \hline B_2 \end{array} \right)$$

endwhile