Step	Algorithm: $C := AB + C$
1a	$\{C = \widehat{C}\}$
4	$A \to \left( A_L \middle  A_R \right), B \to \left( \frac{B_T}{B_B} \right)$ where $A_R$ has 0 columns, $B_B$ has 0 rows
2	$\left  \left\{ C = A_R B_B + \widehat{C} \right. \right.$
3	while $n(A_R) < n(A)$ do
2,3	$\left\{ C = A_R B_B + \widehat{C} \wedge n(A_R) < n(A) \right\}$
5a	Determine block size $b$ $ \left( A_L \middle  A_R \right) \to \left( A_0 \middle  A_1 \middle  A_2 \right), \left( \frac{B_T}{B_B} \right) \to \left( \frac{B_0}{B_1} \right) $
C	where $A_1$ has $b$ columns, $B_1$ has $b$ rows
6	$\left\{ C = A_2 B_2 + \widehat{C} \right\}$
8	$C := A_1 B_1 + C$
7	$\left\{ \qquad C = A_1 B_1 + A_2 B_2 + \widehat{C} $
5b	$A \to \left( A_L \middle  A_R \right) \leftarrow \left( A_0 \middle  A_1 \middle  A_2 \right), \left( \frac{B_T}{B_B} \right) \leftarrow \left( \frac{B_0}{B_1} \middle  B_2 \right)$
2	$\left\{ C = A_R B_B + \widehat{C} \right\}$
	endwhile
2,3	$\left\{ C = A_R B_B + \widehat{C} \wedge \neg (n(A_R) < n(A)) \right\}$
1b	$\left\{ C = AB + \widehat{C} \right\}$

Step	Algorithm: $C := AB + C$
1a	{
4	
	where
2	{
3	while do
2,3	\ \ \
	Determine block size $b$
5a	
	1
6	<pre>where {</pre>
	\ 
8	
7	{
5b	
2	{
	endwhile
2,3	{
1b	{
10	L

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

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

1a $\{C = \widehat{C}$ where  2 $\{C = A_R B_B + \widehat{C}$ 3 while $n(A_R) < n(A)$ do  2,3 $\{C = A_R B_B + \widehat{C} \land n(A_R) < n(A)$ Determine block size $b$ 5a  where  6 $\{B\}$ 7 $\{B\}$ 2 $\{C = A_R B_B + \widehat{C} \land n(A_R) < n(A)\}$ endwhile  2,3 $\{C = A_R B_B + \widehat{C} \land n(A_R) < n(A)\}$	Step	Algorithm: $C := AB + C$
$\begin{array}{c} \text{where} \\ 2 & \{C = A_R B_B + \widehat{C} \\ 3 & \text{while } n(A_R) < n(A) \text{ do} \\ 2,3 & \left\{ \begin{array}{c} C = A_R B_B + \widehat{C} \land n(A_R) < n(A) \\ \end{array} \right. \\ \text{Determine block size } b \\ \\ 5a & \text{where} \\ 6 & \left\{ \begin{array}{c} 8 \\ 8 \\ \end{array} \right. \\ 7 & \left\{ \begin{array}{c} \\ \\ 5b \\ \end{array} \right. \\ 2 & \left\{ \begin{array}{c} C = A_R B_B + \widehat{C} \\ \\ \end{array} \right. \\ \text{endwhile} \end{array}$	1a	$\{C = \widehat{C}\}$
$\begin{array}{c} \text{where} \\ 2 & \{C = A_R B_B + \widehat{C} \\ 3 & \text{while } n(A_R) < n(A) \text{ do} \\ 2,3 & \left\{ \begin{array}{c} C = A_R B_B + \widehat{C} \land n(A_R) < n(A) \\ \end{array} \right. \\ \text{Determine block size } b \\ \\ 5a & \text{where} \\ 6 & \left\{ \begin{array}{c} 8 \\ 8 \\ \end{array} \right. \\ 7 & \left\{ \begin{array}{c} \\ \\ 5b \\ \end{array} \right. \\ 2 & \left\{ \begin{array}{c} C = A_R B_B + \widehat{C} \\ \\ \end{array} \right. \\ \text{endwhile} \end{array}$		
	4	
3 while $n(A_R) < n(A)$ do  2,3 $\begin{cases} C = A_R B_B + \widehat{C} \wedge n(A_R) < n(A) \end{cases}$ Determine block size $b$ 5a  where  6 $\begin{cases} 8 \end{cases}$ 7 $\begin{cases} \\ 5b \end{cases}$ 2 $\begin{cases} C = A_R B_B + \widehat{C} \\ \\ \\ \\ \end{cases}$ endwhile		where
2,3 { $C = A_R B_B + \widehat{C} \wedge n(A_R) < n(A)$ Determine block size $b$ 5a	2	$\left\{ C = A_R B_B + \widehat{C} \right\}$
Determine block size $b$ where  6 {  8  7 {  5b  2 { $C = A_R B_B + \hat{C}$ endwhile}	3	while $n(A_R) < n(A)$ do
$\begin{array}{c c} 5a & \\ & \\ \hline 6 & \\ 8 & \\ \hline 7 & \\ \hline 5b & \\ \hline 2 & \\ C = A_R B_B + \widehat{C} & \\ \hline end while & \\ \hline \end{array}$	2,3	$\left\{ C = A_R B_B + \widehat{C} \wedge n(A_R) < n(A) \right\}$
where		Determine block size $b$
where		
	5a	
	6	
7 {  5b  2 { $C = A_R B_B + \hat{C}$ endwhile}		<u> </u>
$ \begin{array}{c c} \hline 2 & \left\{ C = A_R B_B + \widehat{C} \\ \hline \text{endwhile} \\ \end{array} \right. $		
$ 2  \left\{ \begin{array}{c} C = A_R B_B + \widehat{C} \\ \text{endwhile} \end{array} \right. $	7	<u> </u>
$ 2  \left\{ \begin{array}{c} C = A_R B_B + \widehat{C} \\ \text{endwhile} \end{array} \right. $		
endwhile	5b	
endwhile		
	2	$\left\{ C = A_R B_B + \widehat{C} \right\}$
$2.3  \left\{ C = A_B B_B + \widehat{C} \land \neg (n(A_B) < n(A)) \right\}$		endwhile
	2,3	$\left\{ C = A_R B_B + \widehat{C} \wedge \neg (n(A_R) < n(A)) \right\}$
1b $\left\{C = AB + \widehat{C}\right\}$	1b	

Step	Algorithm: $C := AB + C$
1a	${C = \widehat{C}}$
4	$A \to \left( A_L \middle  A_R \right), B \to \left( \frac{B_T}{B_B} \right)$ where $A_R$ has 0 columns, $B_B$ has 0 rows
2	$\left\{ C = A_R B_B + \widehat{C} \right\}$
3	while $n(A_R) < n(A)$ do
2,3	$\left\{ C = A_R B_B + \widehat{C} \wedge n(A_R) < n(A) \right\}$
	Determine block size b
5a	
	where
6	<b>{</b>
8	
7	<b>{</b>
5b	
2	$\left\{ C = A_R B_B + \widehat{C} \right\}$
	endwhile
2,3	$\left\{ C = A_R B_B + \widehat{C} \wedge \neg (n(A_R) < n(A)) \right\}$
1b	$\left\{ C = AB + \widehat{C} \right\}$

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

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

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

Step	Algorithm: $C := AB + C$	
1a	$\{C = \widehat{C}$	}
4	$A \to \left( A_L \middle  A_R \right), B \to \left( \frac{B_T}{B_B} \right)$ where $A_R$ has 0 columns, $B_B$ has 0 rows	
2	$\left\{C = A_R B_B + \widehat{C}\right\}$	}
3	while $n(A_R) < n(A)$ do	
2,3	$\left\{ C = A_R B_B + \widehat{C} \wedge n(A_R) < n(A) \right\}$	
5a	Determine block size $b$ $\begin{pmatrix} A_L   A_R \end{pmatrix} \rightarrow \begin{pmatrix} A_0   A_1   A_2 \end{pmatrix}, \begin{pmatrix} B_T \\ B_B \end{pmatrix} \rightarrow \begin{pmatrix} B_0 \\ B_1 \\ B_2 \end{pmatrix}$ where $A_1$ has $b$ columns, $B_1$ has $b$ rows	
6	$\left\{ \begin{array}{c} C = A_2B_2 + \widehat{C} \end{array} \right.$	}
8	$C := A_1B_1 + C$	)
7	$\left\{ C = A_1 B_1 + A_2 B_2 + \widehat{C} \right\}$	}
5b	$A \to \left( A_L \middle  A_R \right) \leftarrow \left( A_0 \middle  A_1 \middle  A_2 \right), \left( \frac{B_T}{B_B} \right) \leftarrow \left( \frac{B_0}{B_1} \middle  B_2 \right)$	
2	$\left\{ C = A_R B_B + \widehat{C} \right.$	}
	endwhile	
2,3	$\{C = A_R B_B + \widehat{C} \land \neg (n(A_R) < n(A))\}$	}
1b	$\left\{C = AB + \widehat{C}\right)$	}

Algorithm: $C := AB + C$
$A  o \left( A_L \middle  A_R \right), B  o \left( \frac{B_T}{B_B} \right)$ where $A_R$ has 0 columns, $B_B$ has 0 rows
The rate of containing BB new of rows
while $n(A_R) < n(A)$ do
Determine block size b
$\left(\begin{array}{c c}A_L & A_R\end{array}\right) \to \left(\begin{array}{c c}A_0 & A_1 & A_2\end{array}\right), \left(\begin{array}{c}B_T \\ \hline B_B\end{array}\right) \to \left(\begin{array}{c}B_0 \\ \hline B_2\end{array}\right)$
where $A_1$ has $b$ columns, $B_1$ has $b$ rows
$C := A_1 B_1 + C$
$C := A_1D_1 + C$
$A \to \left( A_L \middle  A_R \right) \leftarrow \left( A_0 \middle  A_1 \middle  A_2 \right), \left( \frac{B_T}{B_B} \right) \leftarrow \left( \frac{B_0}{B_1} \middle  B_2 \right)$
endwhile

Algorithm: C := AB + C

$$A \to \left( A_L \middle| A_R \right), B \to \left( \frac{B_T}{B_B} \right)$$

where  $A_R$  has 0 columns,  $B_B$  has 0 rows

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

Determine block size b

$$\left( A_L \middle| A_R \right) \to \left( A_0 \middle| A_1 \middle| A_2 \right), \left( \frac{B_T}{B_B} \right) \to \left( \frac{B_0}{B_1} \right)$$

where  $A_1$  has b columns,  $B_1$  has b rows

$$C := A_1 B_1 + C$$

$$A \to \left( A_L \middle| A_R \right) \leftarrow \left( A_0 \middle| A_1 \middle| A_2 \right), \left( \frac{B_T}{B_B} \right) \leftarrow \left( \frac{B_0}{B_1} \middle| B_2 \right)$$

endwhile