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1: procedure GHMATECE
2:   for  $j := 1, n$  do
3:     for  $i := 1, m$  do
4:        $ii := 3(i - 1) + 1; jj := 3(j - 1) + 1$ 
5:       Allocate  $Hbuffer$ , buffer of matrices  $3 \times 3$  of size  $g^2$ 
6:       if  $i \neq j$  then
7:         for  $y := 1, g$  do
8:           for  $x := 1, g$  do
9:              $Hbuffer(x, y) \leftarrow \text{GenerateMatrixH}(i, j, x, y)$ 
10:           $Helement \leftarrow \text{SumAllMatricesInBuffer}(Hbuffer)$ 
11:        else
12:           $Helement \leftarrow 0$ 
13:         $G[ii : ii + 2][jj : jj + 2] \leftarrow Gelement$ 
14:         $H[ii : ii + 2][jj : jj + 2] \leftarrow Helement$ 
15:    $\text{Rigid}(H)$ 
16: procedure RIGID( $H$ )
17:   for  $i := 1, m$  do
18:     for  $j := 1, n$  do
19:        $ii := 3(i - 1) + 1; jj := 3(j - 1) + 1$ 
20:       if  $i \neq j$  then
21:          $H[ii : ii + 2][ii : ii + 2] \leftarrow H[ii : ii + 2][ii : ii + 2] + H[ii : ii + 2][jj : jj + 2]$ 
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