```
Merge_Stego(Img1, Img2):
   x_1 = total number of rows in Img1
   y_1 = total number of columns in Img1
   // we have assumed that Img1 and Img2 have same dimension
   Steg_img = zero matrix with dimension [x_1 \times y_1 \times 3]
   for (y = 1 \text{ to } y_1):
      for (x = 1 \text{ to } x_1):
          for (i = 1 \text{ to } 3):
                Q = 8 bits pixel in (x, y, i) of matrix Img1
                W = 8 bits pixel in (a, b, i) of matrix Img2
                Q = Bitwise And operation on Q and [11110000]
                //remove the last 4 LSB of Q by bitand command in MATLAB
                W = Zero extension shift W to the right by 4 bits
                // get only 4 MSB of W by bitshift command in MATLAB
                E = Bitwise Or operation on Q and W
                // by bitor command in MATLAB
                Steg_img[x, y, i] = Steg_img[x, y, i] + E
          endfor
       endfor
   endfor
Output Steg_img
```

We implement the algorithm in MATLAB. Steg_img is a pixel matrix of the stego-image. To convert the matrix of pixels into an image, we can use MATLAB command "imwrite(Steg_img, filename)". For example, "imwrite(Steg_img, 'steg.png'); "will write the matrix Steg_img into a PNG image "steg.png".