**Exercise 8 – Fourier Transform of Images (9.January.2017 15h15-16h)**

Consider matrix A=[4 3; 1 2] and the Fourier transform:

1. Calculate with Matlab (function fft2 and ifft2).
   1. Af=fft2(A)
   2. A2=ifft2(Af)
2. Now we will perform such calculation without Matlab.
3. Write the basis function B(0,0), B(0,1), B(1,0) and B(1,1).
4. Calculate the Fourier transform of A.
5. Calculate the inverse Fourier transform.

Do the results match the Matlab results?