function X = cria\_circulo(L)

X = ones(L,L);

for i=1:L

for j=1:L

if sqrt(i^2+j^2) <= L/3

X(i,j) = 0;

end

end

end

>> X = cria\_circulo(500);

>> imshow(X)

>> X = zeros(5,5)

X =

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

>> X(4,2) = 2

X =

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

0 2 0 0 0

0 0 0 0 0

>> X(4,4) = 1

X =

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

0 2 0 1 0

0 0 0 0 0

>> h = [1 1 1; 2 2 2; 3 3 3]

h =

1 1 1

2 2 2

3 3 3

>> conv2(X,h,'same')

ans =

0 0 0 0 0

0 0 0 0 0

2 2 3 1 1

4 4 6 2 2

6 6 9 3 3

>>