```
%experimentation with upsampling an image
%IMAGE UPSAMPLING
%Upsampling is the process of inserting zeros in between the signal value in order to increase
A = imread('C:\Users\tvasu\Downloads\cameraman.tif');
figure,imagesc(A);colormap("gray");
```



```
M = 2;
N = 3;
B = zeros([size(A,1)*M size(A,2)*N]);
B(1:M:end,1:N:end) = A;
figure,imagesc(B);colormap(gray);
```

```
50
100
150
200
250
300
350
400
450
500
          100
                  200
                          300
                                  400
                                          500
                                                  600
                                                           700
```

```
sz = M*N;
H = fspecial('average',[sz sz]);
C = conv2(B,H,'same');
figure,imagesc(C);colormap(gray);
```

