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|  | **Mat Lab** |
| 1 | **Write a program for image enhancement**  img = imread('peppers.png');  bright\_img = img + 50; % Increase brightness  imshowpair(img, bright\_img, 'montage');  title('Original Image (Left) and Brightened Image (Right)'); |
| 2 | **Write a program for image compression**  img = imread('peppers.png');  small\_img = imresize(img, 0.5); % Compress (reduce size)  big\_img = imresize(small\_img, 2); % Resize back to original  imshowpair(img, big\_img, 'montage');  title('Original Image (Left) and Compressed-Reconstructed Image (Right)'); |
| 3 | **Write a program for color image processing**  img = imread('peppers.png');  red = img(:,:,1);  green = img(:,:,2);  blue = img(:,:,3);  subplot(2,2,1); imshow(img); title('Original');  subplot(2,2,2); imshow(red); title('Red Channel');  subplot(2,2,3); imshow(green); title('Green Channel');  subplot(2,2,4); imshow(blue); title('Blue Channel'); |
| 4 | **Write a program for image segmentation**  img = imread('cameraman.tif');  threshold = 100;  binary\_img = img > threshold;  imshow(binary\_img);  title('Segmented Image (Thresholding)'); |
| 5 | **Write a program for image morphology**  img = imread('text.png');  se = strel('square', 3); % Square structuring element  dilated\_img = imdilate(img, se);  imshowpair(img, dilated\_img, 'montage');  title('Original Image (Left) and Dilated Image (Right)'); |