Mat Lab

Q-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)');
```

* Output

Q-2 Write a program for image compression

->
```
img = imread('peppers.png');
small_img = imresize(img, 0.5);
big_img = imresize(small_img, 2);

imshowpair(img, big_img, 'montage');
title('Original Image (Left) and
        Compressed-Reconstructed Image (Right)');
```

* Output

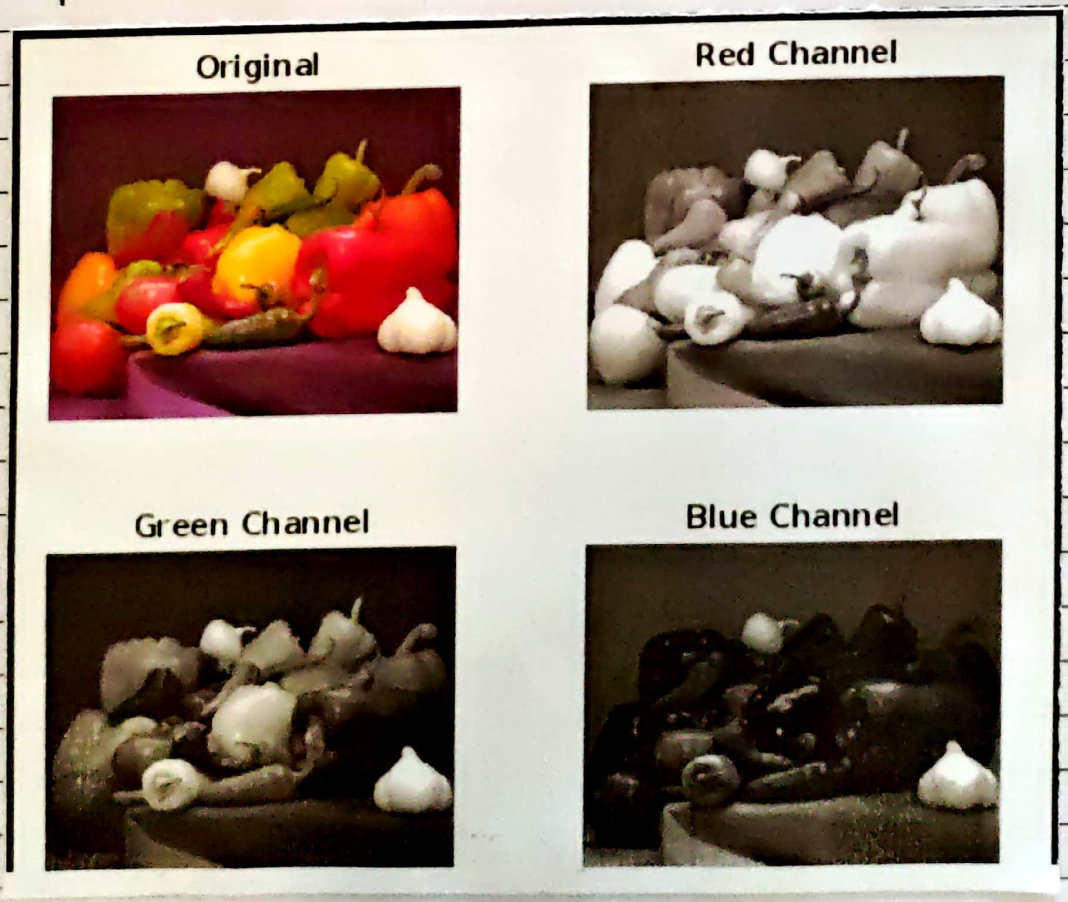
Q-3 Write a program for color image processing

->
```
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(img); title('Red Channel');
subplot(2,2,3); imshow(green); title('Green Channel');
subplot(2,2,4); imshow(blue); title('Blue Channel');
```

* Output.



Q-4 Write a program for image segmentation

->
```
img = imread ('cameraman.tif');
threshold = 100;
binary_img = img > threshold;

imshow (binary_img);
title ('Segmented Image (Thresholding)');
```

* Output

Q-5 Write a program for image morphology

->
```
img = imread ('text.png');
se = strel ('square', 3);
dilated_img = imdilate (img, se);

imshowpair (img, dilated_img, 'montage');
title ('Original Image (Left) and Dilated Image
       (Right)');
```

* Output.