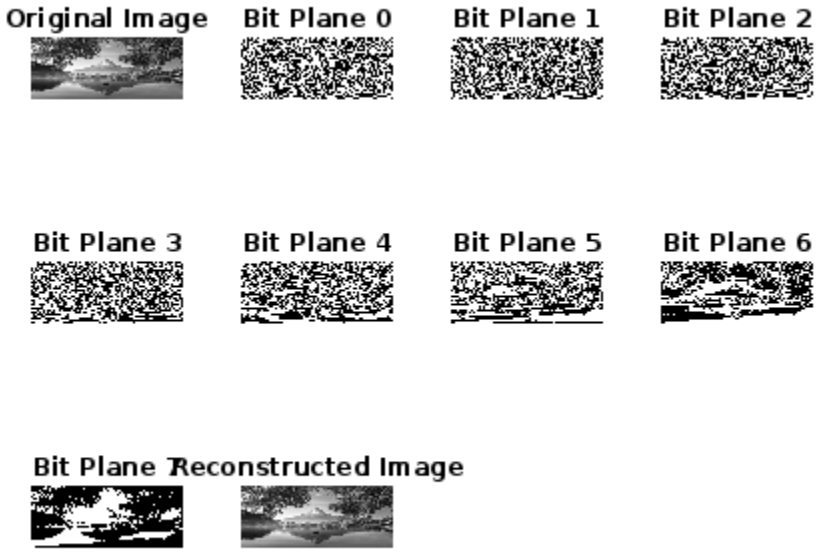
```
%Bit plane slicing
% Created By Jyotiraditya Bhos

 % Read the image from the internet
 img = imread('https://encrypted-tbn0.gstatic.com/images?
q=tbn:ANd9GcSCZlf5lc5tX-0gY-y94pGS0mQdL-D0lCH2OQ&s');
 % Convert the image to grayscale (if it's RGB)
 if size(img, 3) == 3
    img = rgb2gray(img);
 end
 % Get the size of the image
 [rows, cols] = size(img);
 % Initialize reconstruction
 reconstructed_img = zeros(rows, cols, 'uint8');
 % Create a figure to display all results
 figure;
 % Display the original image
 subplot(3, 4, 1);
 imshow(img);
 title('Original Image');
 % Perform Bit Plane Slicing and Reconstruction
 for k = 0:7
 % Extract the k-th bit plane
    bit_plane = bitget(img, k+1);
 % Scale to full intensity for visualization
    bit_plane_image = uint8(bit_plane * 255);
 % Add the weighted contribution to reconstruct the image
    reconstructed_img = reconstructed_img + uint8(bit_plane * 2^k);
 % Display the k-th bit plane
    subplot(3, 4, k+2);
    imshow(bit_plane_image);
    title(['Bit Plane ', num2str(k)]);
 end
 % Display the reconstructed image
 subplot(3, 4, 10);
 imshow(reconstructed_img);
 title('Reconstructed Image');
 % Add a super title
 sgtitle('Original Image, Bit Planes, and Reconstructed Image');
```

Original Image, Bit Planes, and Reconstructed Image



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