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```
% bit plane splicing
% created by Srinivas Vatsav
clear all;
close all;
clc;
% Define the image URL
imageURL = 'https://content.tupaki.com/twdata/2022/0422/news/Interesting-
title-for-Nandamuri-Balakrishna-s-next--1651315152-1184.jpg'; % Replace with
your image link

% Read the image from the URL
img = webread(imageURL);

% Convert the image to grayscale
grayImg = rgb2gray(img);

% Get the size of the image
[rows, cols] = size(grayImg);

% Create a figure to display the bit planes
figure;
for bit = 7:-1:0 % Start from MSB (bit 7) to LSB (bit 0)
    % Extract the current bit plane
    bitPlane = bitget(grayImg, bit + 1);

    % Convert to 0-255 for display purposes
    bitPlaneImage = uint8(bitPlane * 255);

    % Display the bit-plane
    subplot(2, 4, 8-bit); % Arrange in a 2x4 grid
    imshow(bitPlaneImage);
    title(['Bit plane ', num2str(bit)]);
end

% Show the original grayscale image
figure;
imshow(grayImg);
title('Original Grayscale Image');
```



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Original Grayscale Image



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