```
close all; % closes all figures

% read images and convert to single format
im1 = im2single(imread('./blackpanther.jpg'));
im2 = im2single(imread('./chadwick.jpg'));

% convert to grayscale
%im1 = rgb2gray(im1);
%im2 = rgb2gray(im2);

% uncomment this when debugging hybridImage so that you don't have to keep
aligning
%keyboard;

%% Choose the cutoff frequencies and compute the hybrid image (you supply
%% this code)
cutoff_low = 5;
cutoff_high = 2;
n = 3;
[im2,im1] = hybridImage(im1, im2, cutoff_low, cutoff_high, n);

%sum the aligned images
hybrid = im2 + im1;
hybrid = imresize(hybrid, 25);

imshow(hybrid);


%% Compute and display Gaussian and Laplacian Pyramids (you need to supply
this function)
function [im4, im3] = hybridImage(im1, im2, cutoff_low, cutoff_high, n)

    %Blur image 1 - low frequency
    for c = 1:n
       Z = imgaussfilt(im2,cutoff_low); %2D Gaussian
       im3 = imresize(Z, 0.5);
    end

    filter = [1 2 1; 0 0 0; -1 -2 -1];
    %Hig hfrequency of image two
    for l = 1:n
```

```
    V = 1-imgaussfilt(im1,cutoff_high); %Laplacian
    im4 = imresize(double(V),0.5);
  end

  % use this if you want to align the two images (e.g., by the eyes) and crop
  % them to be of same size
  [im4,im3] = align_images(im3, im4);
end
```