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% Auto-generated by colorThresholder app on 05-Oct-2016
%_____
% Convert RGB image to chosen color space
I = rqb2hsv(RGB);
% Define thresholds for channel 1 based on histogram settings
channel1Min = 0.115; %Conversion to openCV range channel1Min*180
channel1Max = 0.210; %Conversion to openCV range channel1Max*180
% Define thresholds for channel 2 based on histogram settings
channel2Min = 0.300; %Conversion to openCV range channel2Min*255
channel2Max = 1.000; %Conversion to openCV range channel2Max*255
% Define thresholds for channel 3 based on histogram settings
channel3Min = 0.403; %Conversion to openCV range channel3Min*255
channel3Max = 1.000; %Conversion to openCV range channel3Min*255
% Create mask based on chosen histogram thresholds
BW = (I(:,:,1) >= channel1Min) & (I(:,:,1) <= channel1Max) & ...
   (I(:,:,2) \ge \text{channel2Min}) \& (I(:,:,2) \le \text{channel2Max}) \& \dots
   (I(:,:,3) >= channel3Min) & (I(:,:,3) <= channel3Max);
% Initialize output masked image based on input image.
maskedRGBImage = RGB;
% Set background pixels where BW is false to zero.
maskedRGBImage(repmat(~BW,[1 1 3])) = 0;
```

function [BW, maskedRGBImage] = findYellow(RGB)