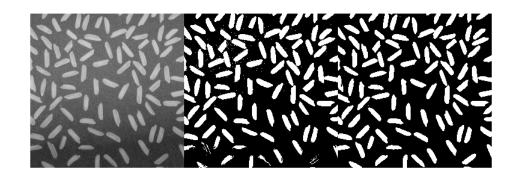
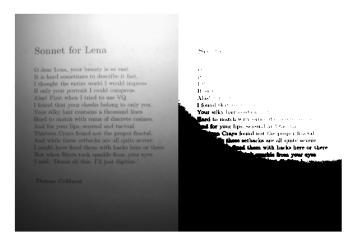
```
%Pratap Luitel
%ENGS 111
%HW 4
%Part 3
im1 = imread('rice.png');
[i2,m2] = imread('son1-1.gif');
%convert to type double
imIn1 = im2double(im1);
imIn2 = ind2gray(i2,m2);
imIn2 = im2double(imIn2);
imageSequence1 = zeros(size(imIn1,1),size(imIn1,2),1,3);
imageSequence2 = zeros(size(imIn2,1),size(imIn2,2),1,3);
n = [15];
%SE
startX = floor(n(1)/2);
x = repmat(-startX:startX,[n(1) 1]);
y = repmat([-startX:startX]',[1 n(1)]);
r = sqrt(x.^2 + y.^2);
SE = zeros(n(1),n(1));
SE(r \le startX) = 1;
%rice.png
imageSequence1(:,:,1,1) = imIn1;
%threshold without top hat filtering
imageSequence1(:,:,1,2) = im2bw(imIn1,0.5);
%threshold after top hat filtering
tempImIn1 = topBottomHat(imIn1,SE,1);
imageSequence1(:,:,1,3) = im2bw(tempImIn1,0.2);
%son1-1.gif
imageSequence2(:,:,1,1) = imIn2;
%threshold without bottom hat filtering
imageSequence2(:,:,1,2) = im2bw(imIn2,0.4);
%threshold after bottom hat filtering
tempImIn2 = topBottomHat(imIn2,SE,0);
imageSequence2(:,:,1,3) = \sim im2bw(tempImIn2,0.06);
figure(1)
montage(imageSequence1, 'size',[1,3]);
figure(2)
montage(imageSequence2, 'size',[1 3]);
```





## Sonnet for Lena

O dear Lean, your beauty is so want. It is hard sometimes to describe it fast. I thought the settle world I would impress if only your portrait i could compress. Alas! First when I tried to use VQ i found that your checks belong to only you. Your sitty bair contains a thousand lines Hard to mach with sums of discrete coniess. And for your lips, setmal and tactual Thisteres Crays found not the proper fractal. And while these sethecks are all quite severe i might have fixed them with hack here or three But when hiters took spacific from your eyes I said. Dann all this, I'll just digitize."

Lhomas Colthurst

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