

```

%===== segmentB =====
%
% script segmentB
%
% This is a Matlab script that will run the Bayesian relaxation
% for segmenting an image. You should select two images from the
% homework Matlab file and perform segmentation on them.
%
% This code uses some Matlab tricks to be somewhat generic. First,
% all arguments are encapsulated into a cell array. This works as
% follows. The cell array belows consists of two arguments:
%
% >> sampleCellArray = {40, 34};
%
% that when expanded as an argument to a function, provides two
% inputs to the function,
%
% >> plus( sampleCellArray{:} )
%
% The output should be the addition of the two arguments:
%
% ans =
%
%      74
%
% Anyhow, this function expectes the same, but the arguments are
% consistent with what the segKmeans function expects.
%
%===== segmentB =====
close all
load('segment.mat');
picks = [1 2];

for i = 1:length(picks)
    switch (picks(i))
        case 1,
            images{i} = westin;
            iparms{i} = { 10 , [3, 10, 60, 140, 150], 1 };
        case 2,
            images{i} = fish04;
            iparms{i} = { 10 , [1, 5 ,40, 80, 120], 1 };
    end
end

for i = 1:length(images)
    [segimg{i}, K, nmeans{i}] = segBayes(double(images{i}), iparms{i}{:});

    figure(3*i-2);
    imagesc(images{i});
    colormap('gray');
    axis('image');

    figure(3*i-1);
    imagesc(segimg{i});
    colormap('default');
    axis('image');
end

```

```
figure(3*i);  
imagesc(K);  
colormap('gray');  
axis('image');  
nmeans{i}
```

```
end
```

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%===== segmentB =====
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```
ans =
```

```
7.3487    35.7866    79.4104   121.9027   169.7822
```

```
ans =
```

```
5.2687    15.5242    45.8232    80.0602   111.4166
```





