```matlab
%============================ segmentI ============================
%
%  script segmentI
%
%
%  This is a Matlab script that will run the simple k-means algorithm
%  for segmenting an image.   You should select two images from the
%  homework Matlab file and perform segmentation on them. The output will
%  be used by another script of mine for visualization.
%
%
%  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.
%
%============================ segmentI ============================
close all
clear
load('segment.mat');
picks = [1 2];

for i = 1:length(picks)
  switch (picks(i))
    case 1,
      images{i} = westin;
      iparms{i} = { 5 , 100, [3, 10, 60, 140, 150] };
    case 2,
      images{i} = fish04;
      iparms{i} = { 5 , 40, [1, 5 ,40, 80, 120] };
  end
end
% Add more cases if you want to do all of the images, and change
% "picks" accordingly.


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

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

```matlab
  figure(3 * i + 1);
  imagesc(uint8(segimg{i}));
  axis image;
  colormap('default');

  figure(3 * i + 2);
  imagesc(uint8(K));
  axis image;
  colormap('gray');

  nmeans{i};
end

%
%=============================== segmentI ===============================
```