```
function [nmat] = JPEG_Encode(Pixels)

Pixels=im2double(Pixels)
Q= [16 11 10 16 24 40 51 61;
    12 12 14 19 26 58 60 55;
    14 13 16 24 40 57 69 56;
    14 17 22 29 51 87 80 62;
    18 22 37 56 68 109 103 77;
    24 35 55 64 81 104 113 92;
    49 64 78 87 103 121 120 101;
    72 92 95 98 112 100 103 99];

[rows, cols]=size(Pixels);
% Figure out the size of each block in rows.
% Most will be blockSizeR but there may be a remainder amount of less
 than that.
wholeBlockRows = floor(rows / 8);
blockVectorR = [8 * ones(1, wholeBlockRows)];
% Figure out the size of each block in columns.

Not enough input arguments.

Error in JPEG_Encode (line 2)
Pixels=im2double(Pixels)
```

The following segments the picture to 8x8 blocks

```
wholeBlockCols = floor(cols / 8);
blockVectorC = [8 * ones(1, wholeBlockCols)];
segment=mat2cell(Pixels, blockVectorR, blockVectorC);
numPlotsR=size(segment, 1);
numPlotsC=size(segment,2);
```

The cells are 64x64, we want to take the DCT of each block

```
nmat=zeros(4096,64);
count=1;
for i=1:numPlotsR %Sort through the outer matrix
    for j=1:numPlotsC
        temp=dct2(segment{i,j} - 128)./Q; %takes the DCT of the cell.
 Not sure if this needs to be a float
        temp=ZigzagMtx2Vector(temp);
        for k=1:64
            nmat(count,:)=temp;
        end
        count=count+1;
    end
```

```
end
JPEG_entropy_encode(4096,64,8,Q,nmat,'./',1)

end
```

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