Marking Scheme

Quiz Paper
BSc CE

Digital Image Processing (0750474)

Second Quiz Second semester Date: 16/04/2012
Section 1
Weighting 5% of the module total

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Question 1

This question is attributed with 5 marks if answered properly; the answer is the following:

```matlab
function g = ImageAdjust (f)
[M N]= size(f);
if strcmp(class(f),'double')
    g = zeros(M,N);
    Bottom =0;
    Top = 1;
elseif strcmp(class(f),'uint8')
    g = uint8(zeros(M,N));
    Bottom =0;
    Top = 255;
elseif strcmp(class(f),'uint16')
    g = uint16(zeros(M,N));
    Bottom =0;
    Top = 65535;
else
    error('The class of the image is not supported by IPT');
end
L = min(f(:));
H = max(f(:));
for x =1:M
    for y= 1:N
        g(x,y)=uint8(Bottom + ((f(x,y)-L)/(H-L))*(Top - Bottom));
    end
end
```

(2.5 marks) (1 mark) (1.5 mark)