Multimedia

Assignment 4 – Scalar Quantization Algorithm

Due Dates

Normal: The week starting from 4 – 12 – 2016

Notes:

The sent “image read/write” file contains two methods read and write image to be used

in your assignment.

You can use the attached image “lena.jpg”

1‐ Inputs :

* grayscale image in which the red, green and blue components all have equal intensity
* the number of quantization levels.

2‐ Compression :

* Read the image using the sent code.
* Construct the scalar quantizer (grouping and splitting till reach the required averages).
* Quantize the image using the quantizer you built
* save the compressed image and the quantizer on file.

3‐ Decompression

* Read the compressed img and the quantizer from the file.
* Dequantize the data using the quantizer.
* Write the dequantized image using the sent code.