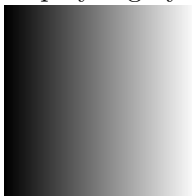


MATH 5300 - ASSIGNMENT 4

MAY 14, 2008

On Octave/Matlab find a command to:

- (1) make a matrix of 256×1 ones
- (2) make a matrix of the integers 0 through 255 in a single row
- (3) make a column of the integers 0 through 255
- (4) make a 256×256 matrix with the rows, all the same, equal to the numbers 0 to 255
- (5) make a 256×256 matrix with the columns, all the same, equal to the numbers 0 to 255
- (6) make a 256×256 matrix of all zeros
- (7) make a 256×256 matrix of all ones
- (8) make a 256×256 matrix of the value 128
- (9) make a 256×256 matrix of all zeros
- (10) display a greyscale image like the following



- (11) display the RB face of the color cube (see figure 6.9 of page 404 of the text)
- (12) display the RG face of the color cube
- (13) display the GB face of the color cube
- (14) display the YB face of the color cube
- (15) display the RC face of the color cube
- (16) display the GM face of the color cube
- (17) display the whole color cube in a cross with white regions where there doesn't need to be anything
- (18) display something similar to the rainbow image that appears on the Math 5300 facebook page
- (19) shift the entries of a matrix **A** one place left (wrapping around left \rightarrow right)
- (20) shift the entries of a matrix **A** one pixel down (wrapping around bottom \rightarrow top)
- (21) shift the entries of a matrix **A** one place left (dropping values on the left edge)
- (22) shift the entries of a matrix **A** one place down (dropping values on the bottom edge)

Date: due: May 26, 2008.