Homework #1

1.1   Write a program to generate following images

Figure 1: The result of upside down, right-side left and diagonally mirrored.

The program is written by Matlab, and it has only input of one channel bmp image. The algorithm is clarified as follow:

(1)   Upside down: Reshuffle row pixels from top to down once.

(2)   Right-side Left: Reshuffle column pixels from left to right once.

(3)   Diagonally mirrored: Reshuffle each pixels from top left to down right.

1.2   Use Photoshop to generate following images

Figure 2: The result of rotating 45 degrees clockwise, shrinking, and binarizing at 128.

(1)   All results in 1.2 done by Adobe Photoshop CS3.