Computer Vision HW#6

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**Task Description**

Compute and output Yokoi Connectivity Number of a binarized image. In this task, we first down-sample lena from 512x512 to 64x64 by using 8x8 blocks as a unit and taking the topmost-left pixel as the down-sampled data.

**Language & Tool**

* Python + Numpy
* OpenCV (for reading image only)

**Work Flow & Results**

We first read in lena.bmp using function cv2.imread() and store the pixel values in a 2D array `img`. Then, as in the task description, we binarize the image thresholds at 128 and down-sample it from 512x512 to 64x64 by using 8x8 blocks as a unit and taking the topmost-left pixel as the down-sampled data.

Computing Yokoi Connectivity Number is simple, just follow the formulas listed in the course material at page 38 and 39. The next page prints the outcome of my program.

To reproduce the result, execute the following command:

>> python ./main.py > output.txt

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