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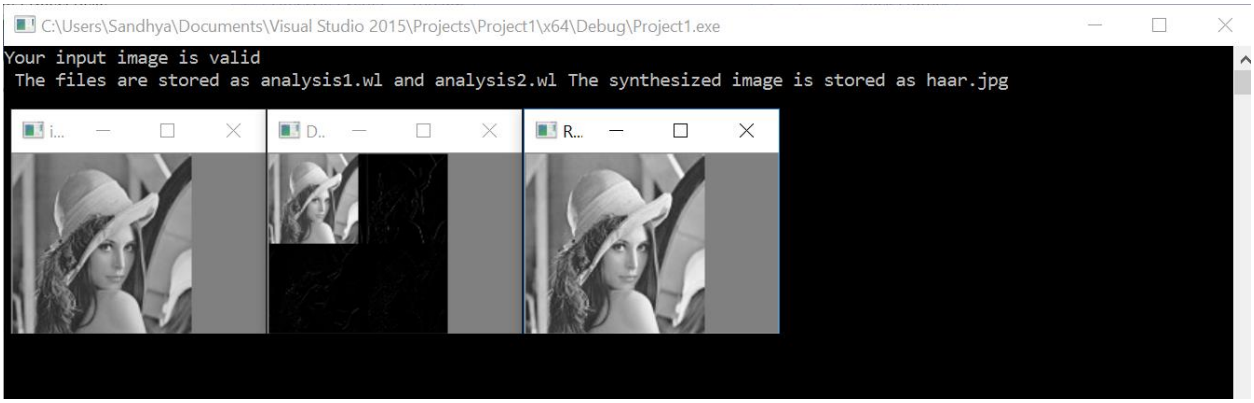
ASSIGNMENT 1:

HAAR WAVELET:



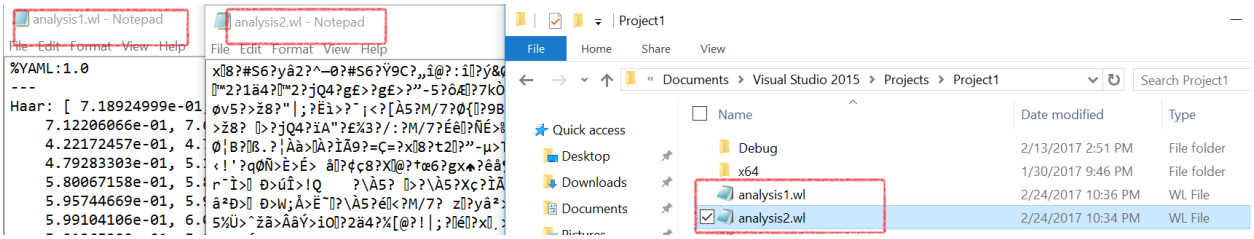
Steps:

The program checks if the image is valid (condition: 2^n * 2^n), if not asks the user to enter a valid image.

The first image is the input.

The center image shows the analysed version. Below attached is a zoomed version to check the minute details

This image is read into 2 files with .wl extensions.

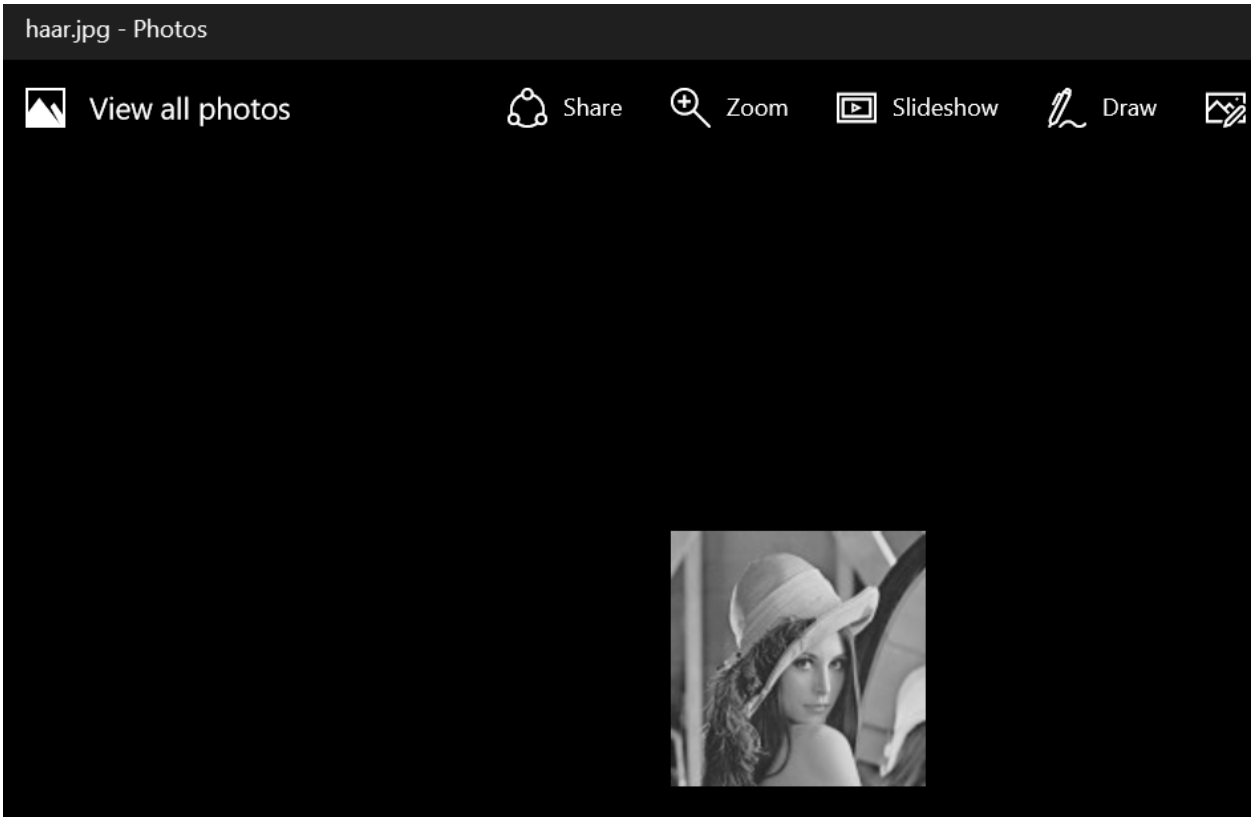


One method has the floating point values, and the other has a binary that looks like the ones generated in eclipse.

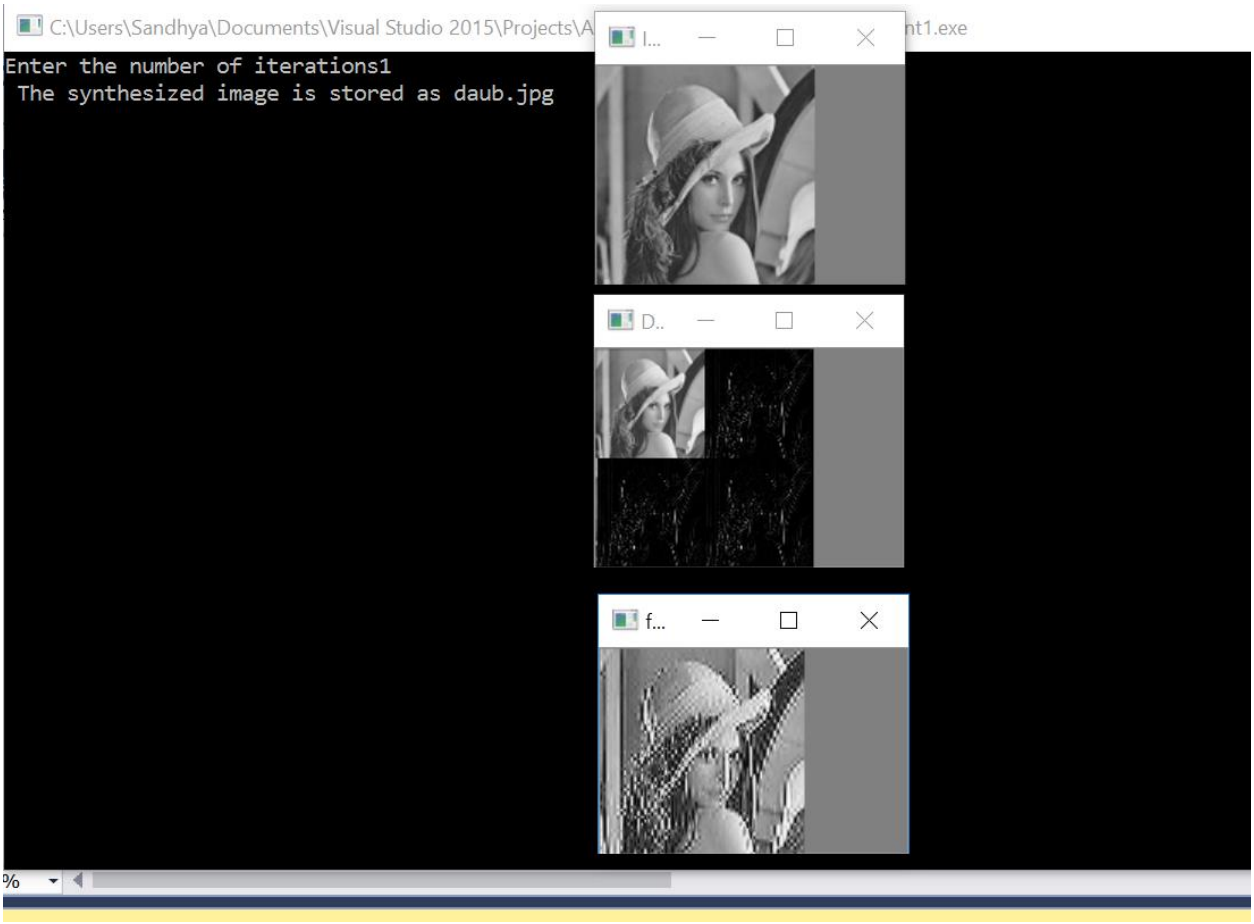
Though these don't look closer to the ones that you mentioned in class. I wanted to try and give it a shot. I just modified the snippets from the web to match our problem.

The third image is the reconstructed image.

And the image is saved as "haar.jpg"



DAUBECHIES WAVELET:



Steps:

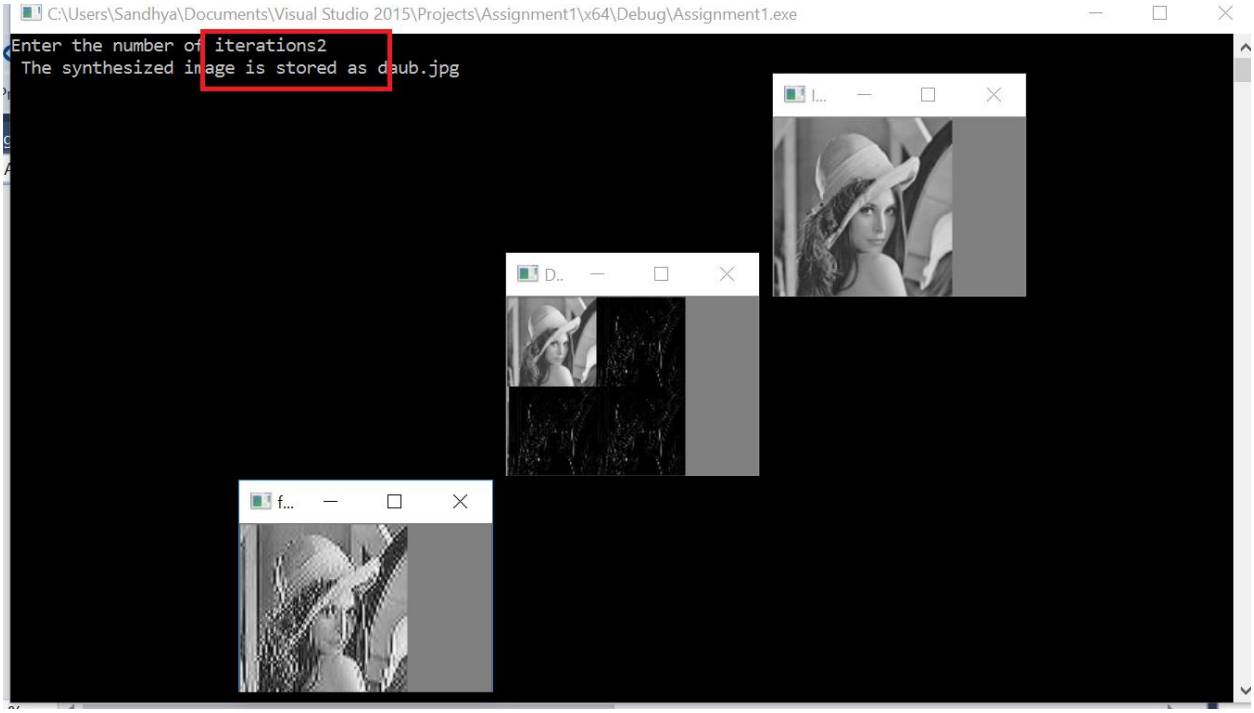
Asks the user for the number of iterations

The first frame is the input image.

The second frame represents the deconstructed image.

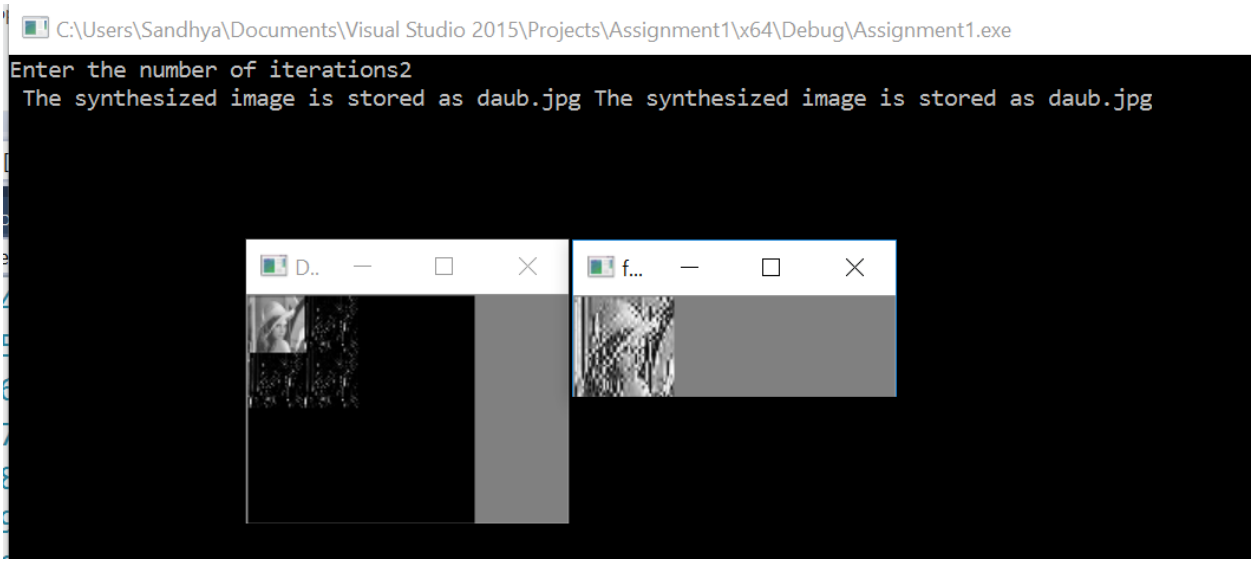
The third image is a lossy reconstruction.

Iteration 2 output:



The first iteration is displayed initially. And then followed by the second iteration results.

Here the details of the first iteration is not displayed, but the size is reduced appropriately and calculates the first frame. Ran out of time, before I could correct this one.



The final image is stored in daub.jpg

REFERENCES:

Opencv website, blogs, class notes