1.a.

ps0-1-a-1.png

ps0-1-a-2.png

2.a.

ps0-2-a-1.png

2.b.

ps0-2-b-1.png

2.c.

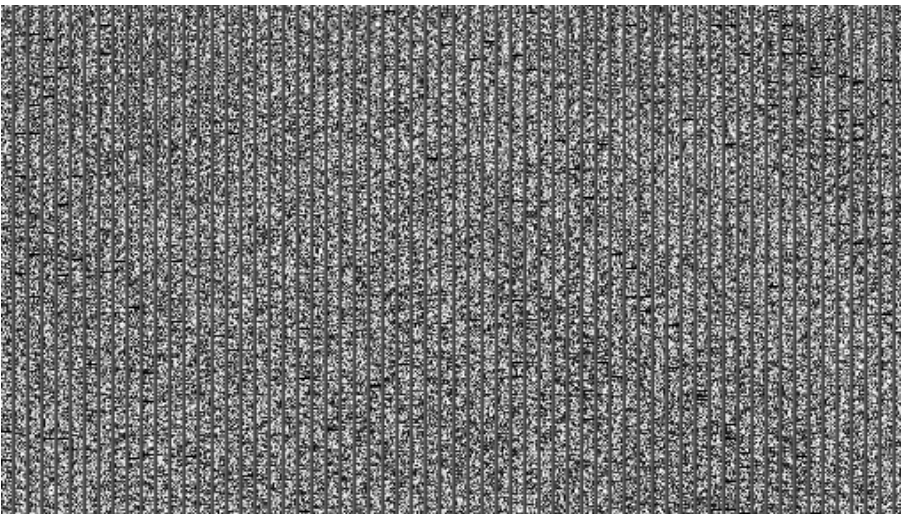ps0-2-c-1.png

3.a.

ps0-3-a-1.png

4.a. Max pixel value of img1 green is: 255

Mean pixel value of img1 green is: 116.68169487847223

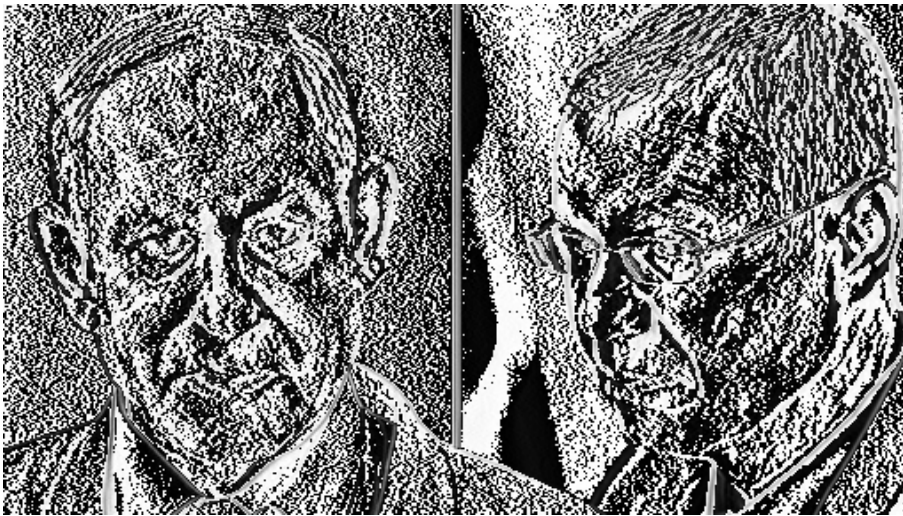Std value of img1 green is: 46.1883770060865

4.b.

ps0-4-b-1.png

4.c.

ps0-4-c-1.png

4.d.

ps0-4-d-1.png

Negative values become 0.

5.a.

ps0-5-a-1.png

I had to use sigma=25

5.b.

ps0-5-b-1.png

5.c. The human eye is less sensitive to changes in the blue channel.