

Kwantyzacja obrazu i dithering - Lab04

Mariusz Lubowicki

Skuteczność działania algorytmów

Odcienie szarości:

Image 0008.png grayscale

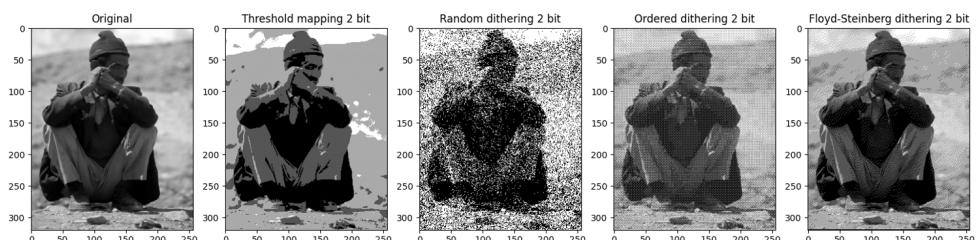
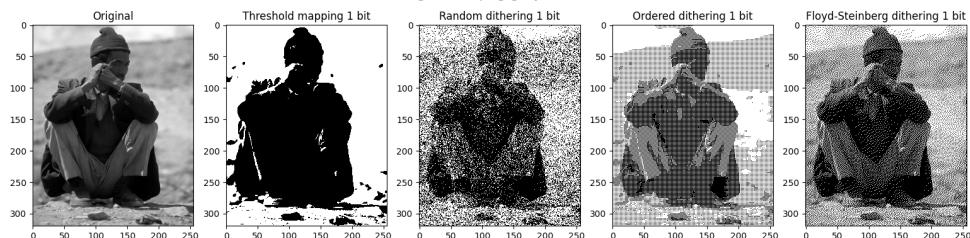


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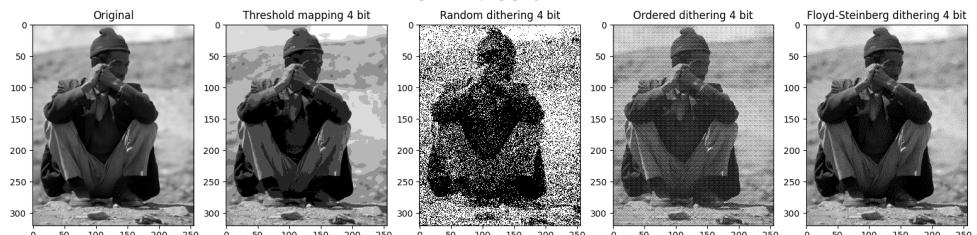


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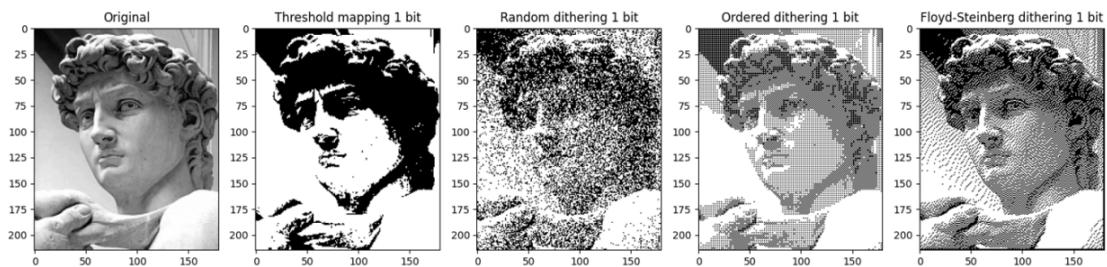


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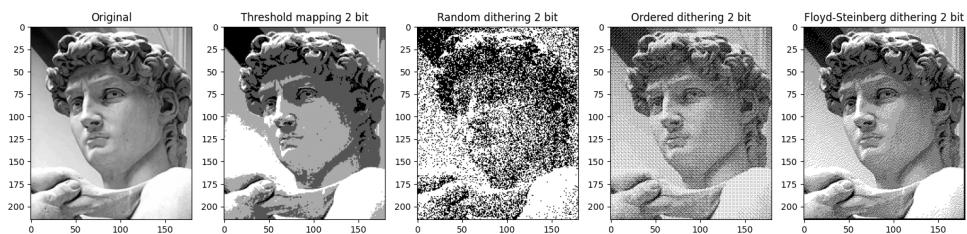


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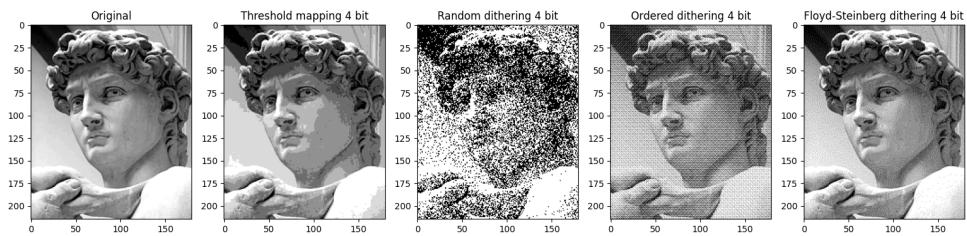


Image 0010.jpg grayscale

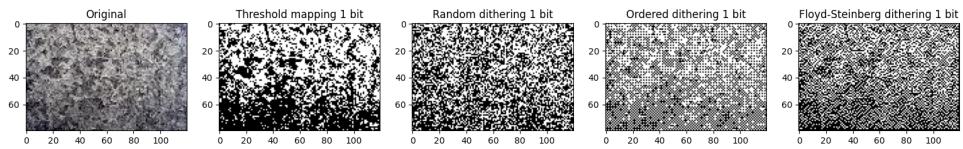


Image 0010.jpg grayscale

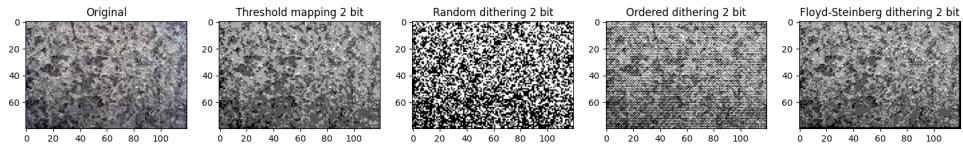
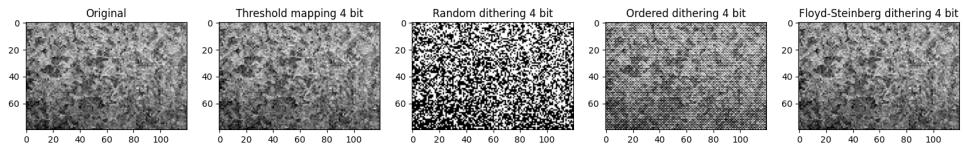


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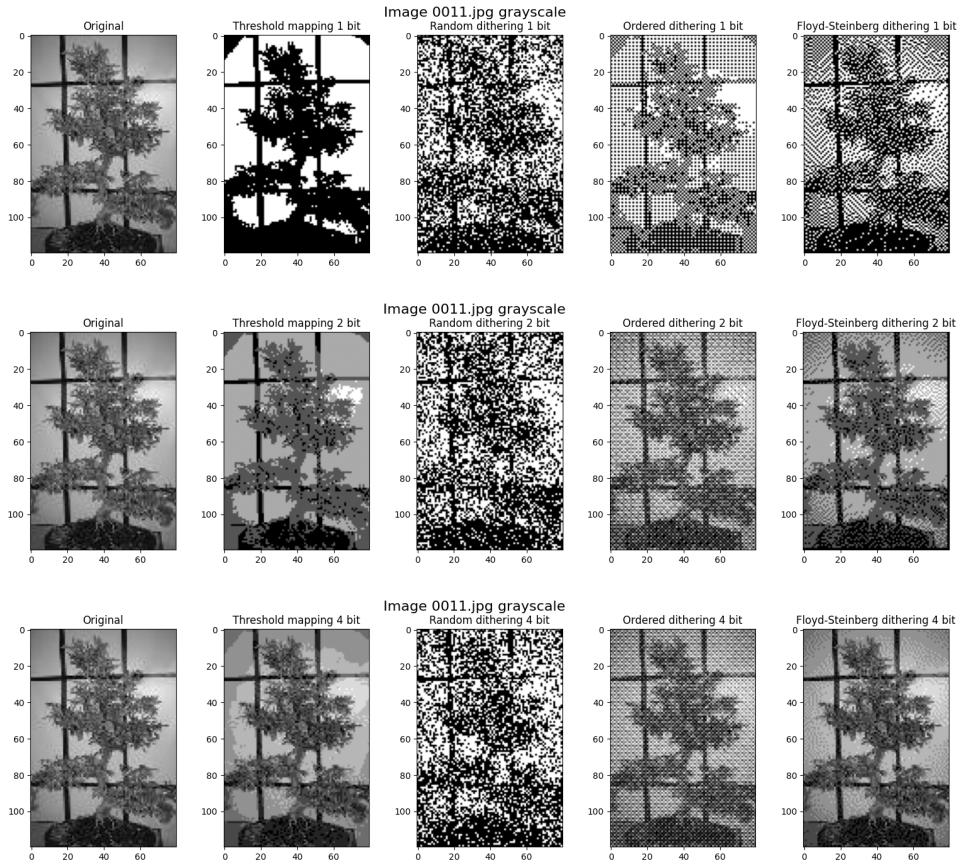


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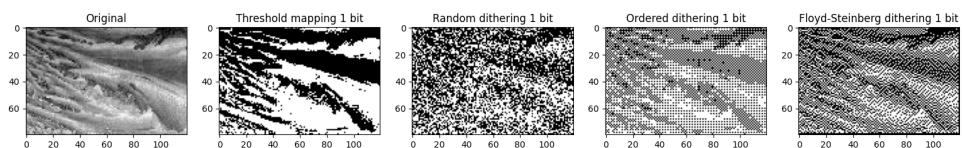


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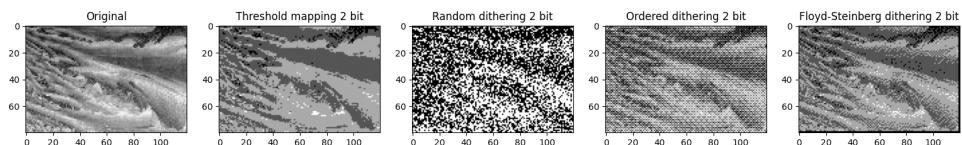
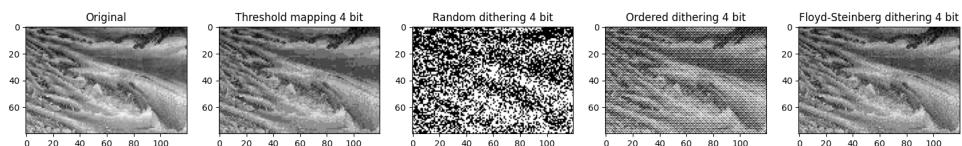


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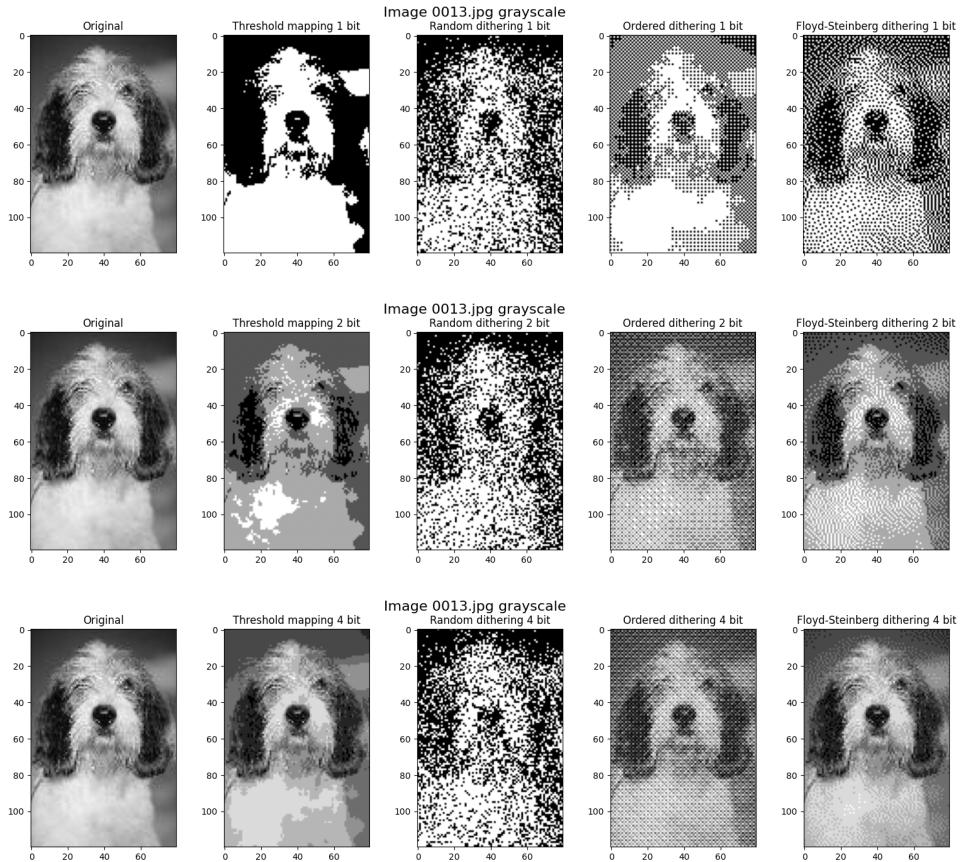


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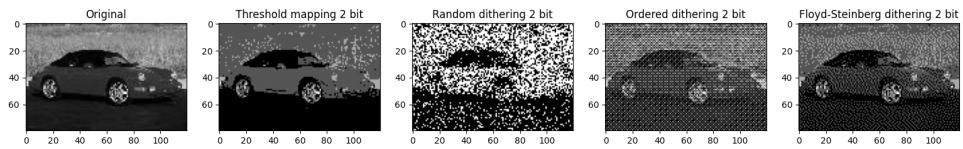


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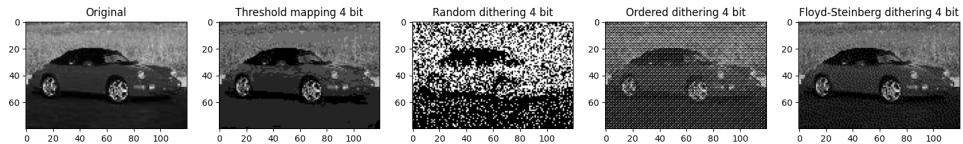
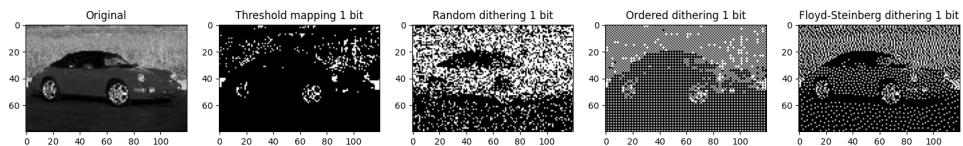


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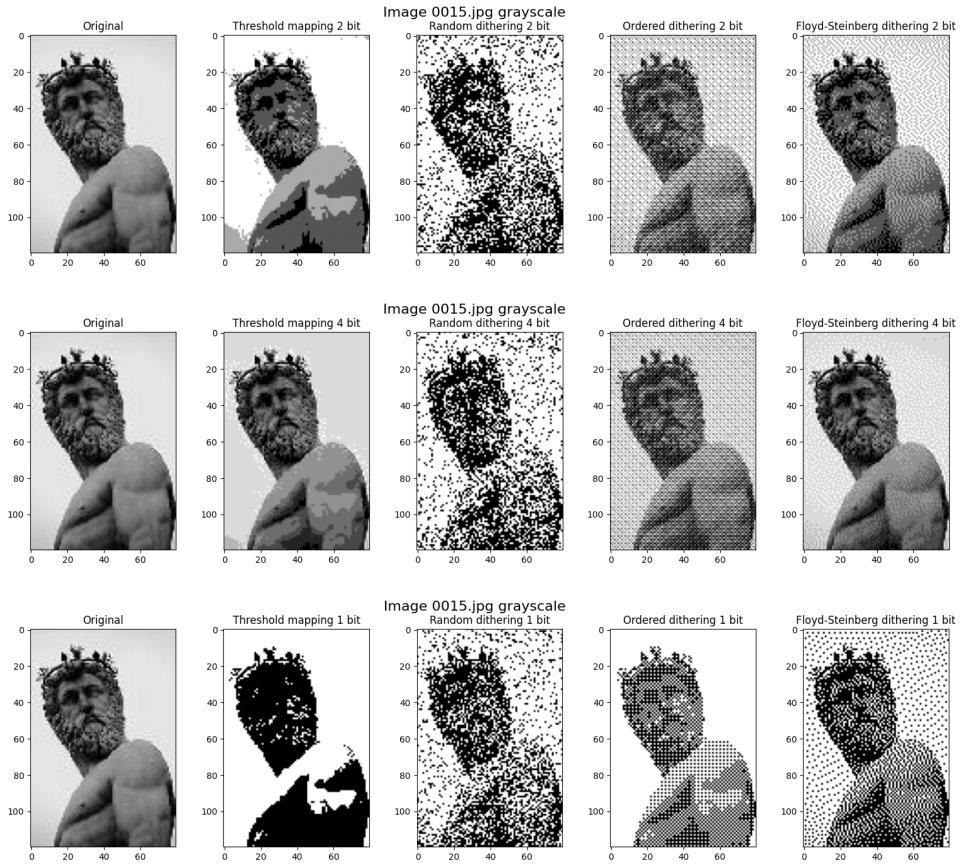


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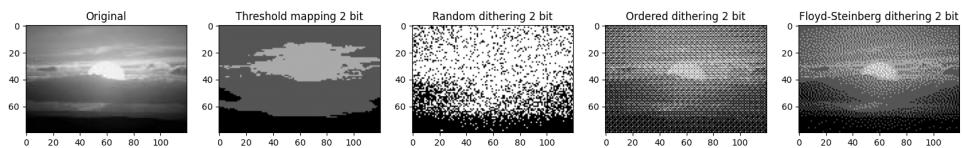


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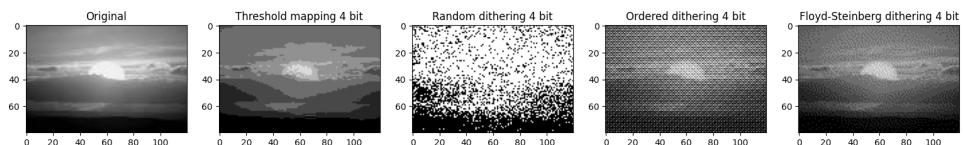
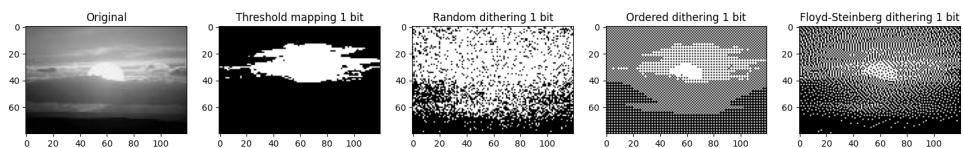


Image 0016.jpg grayscale



Kolor:

Image 0016.jpg paleta 8 kolorów

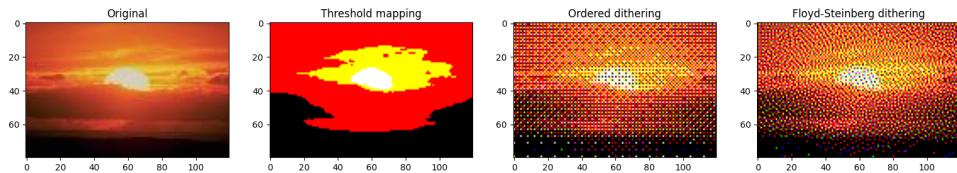
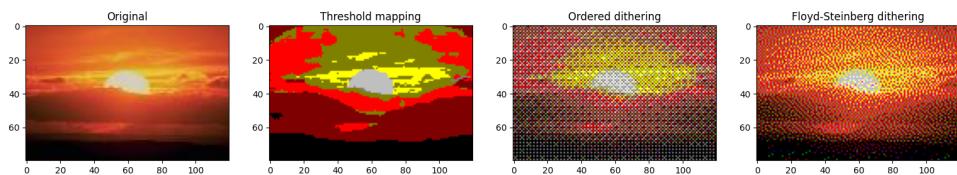
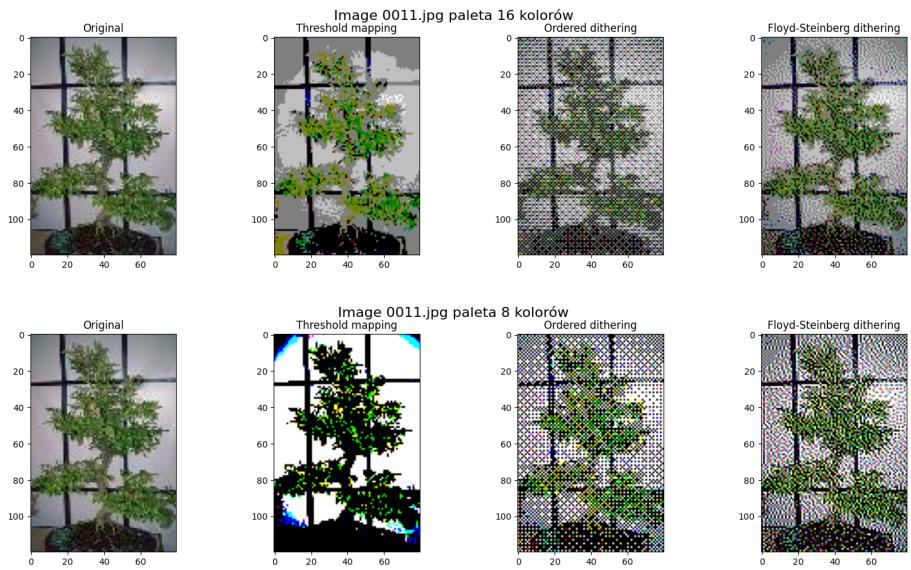


Image 0016.jpg paleta 16 kolorów





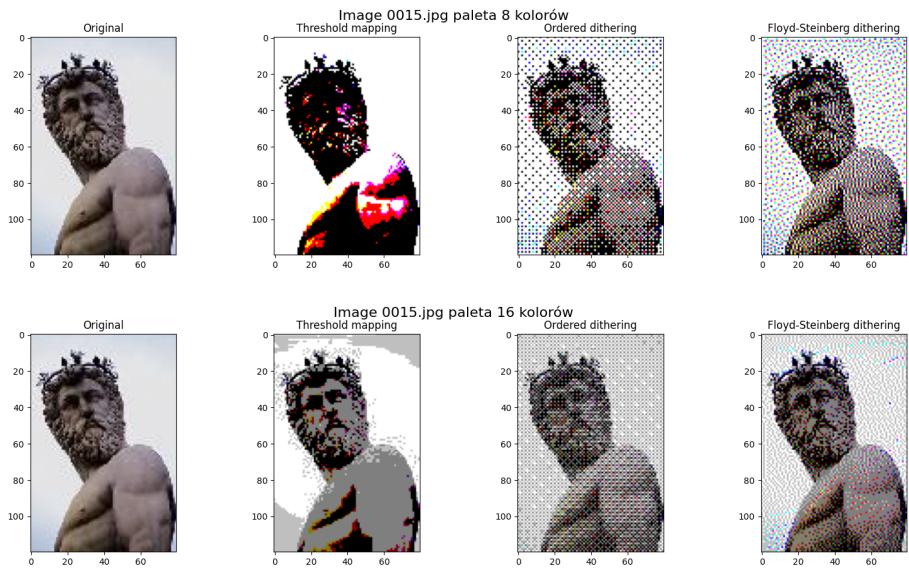


Image 0014.jpg paleta 8 kolorów

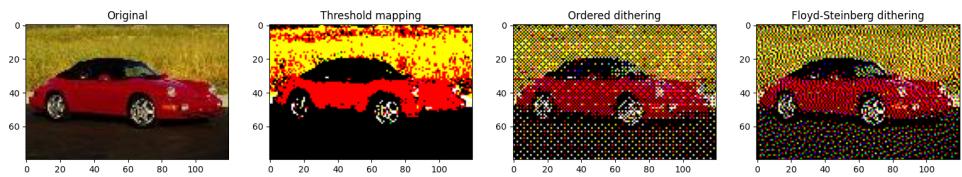
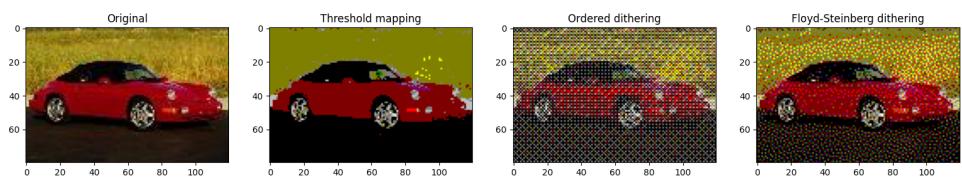


Image 0014.jpg paleta 16 kolorów



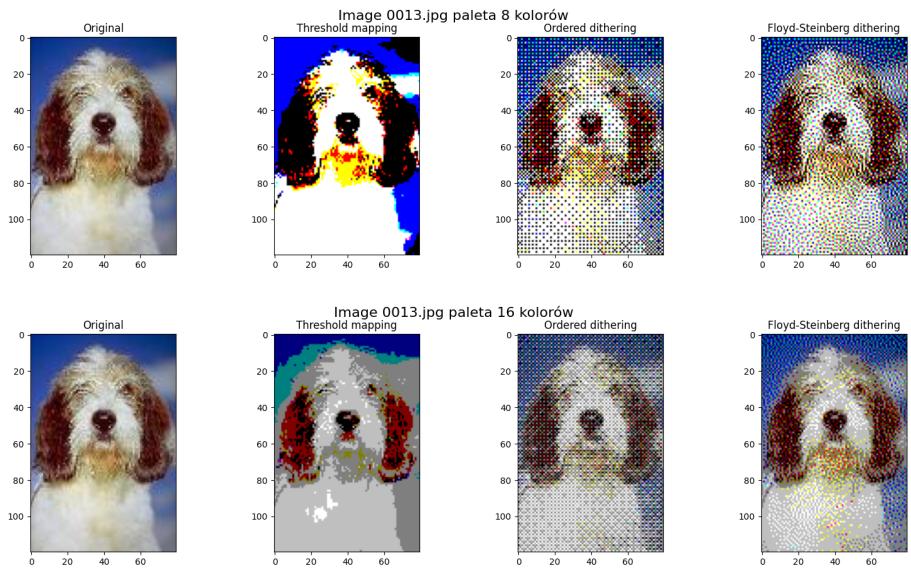


Image 0012.jpg paleta 8 kolorów

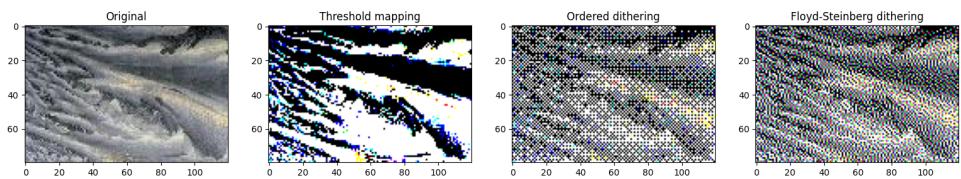


Image 0012.jpg paleta 16 kolorów

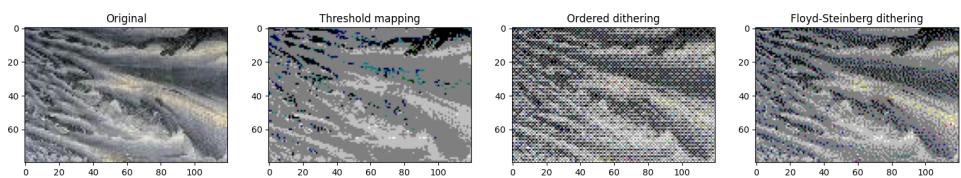


Image 0010.jpg paleta 8 kolorów

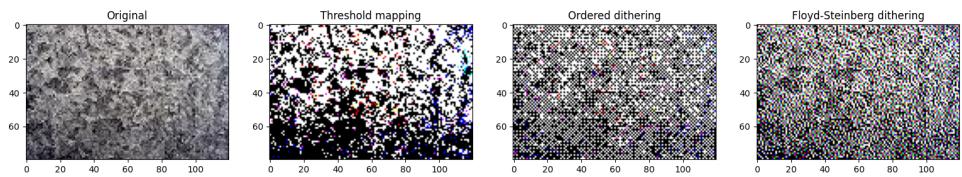


Image 0010.jpg paleta 16 kolorów

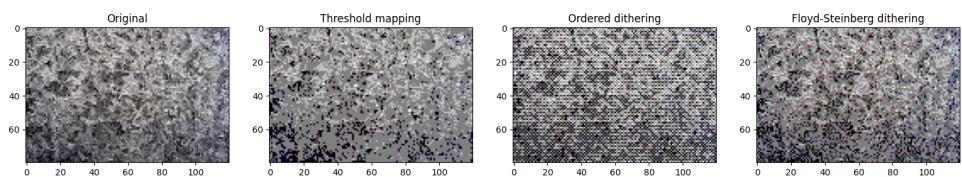


Image 0004.png paleta 8 kolorów

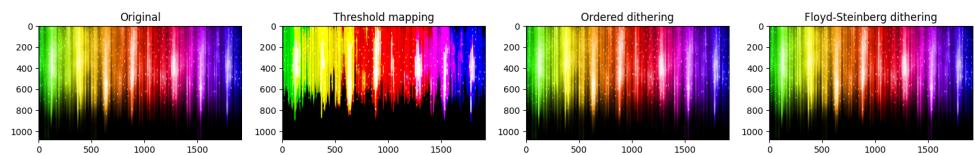
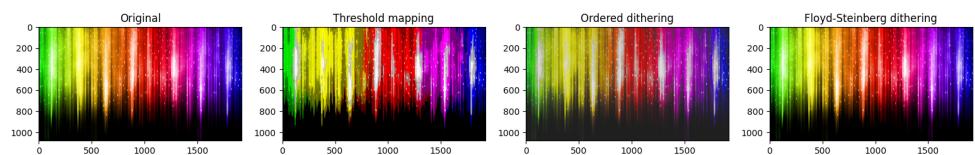


Image 0004.png paleta 16 kolorów



Wnioski

Metoda Floyda Steinberga góruje nad pozostałymi metodami, metoda zoorganizowana sprawia że przy obrazach w odcieniach szarości obraz jest o wiele ciemniejszy i jednolity z barwami niż w metodzie Floyda.

W większości obrazów przy zastosowaniu metod ditheringu jesteśmy w stanie bardzo dobrze odwzorować obraz docelowy już przy zastosowaniu 2 bitów szarości dla obrazu w skali szarości (przy 200x200 4bity wystarczą) i 4 bitowej paletie koloru dla obrazu kolorowego danym to że obraz źródłowy ma ok. 400x400+