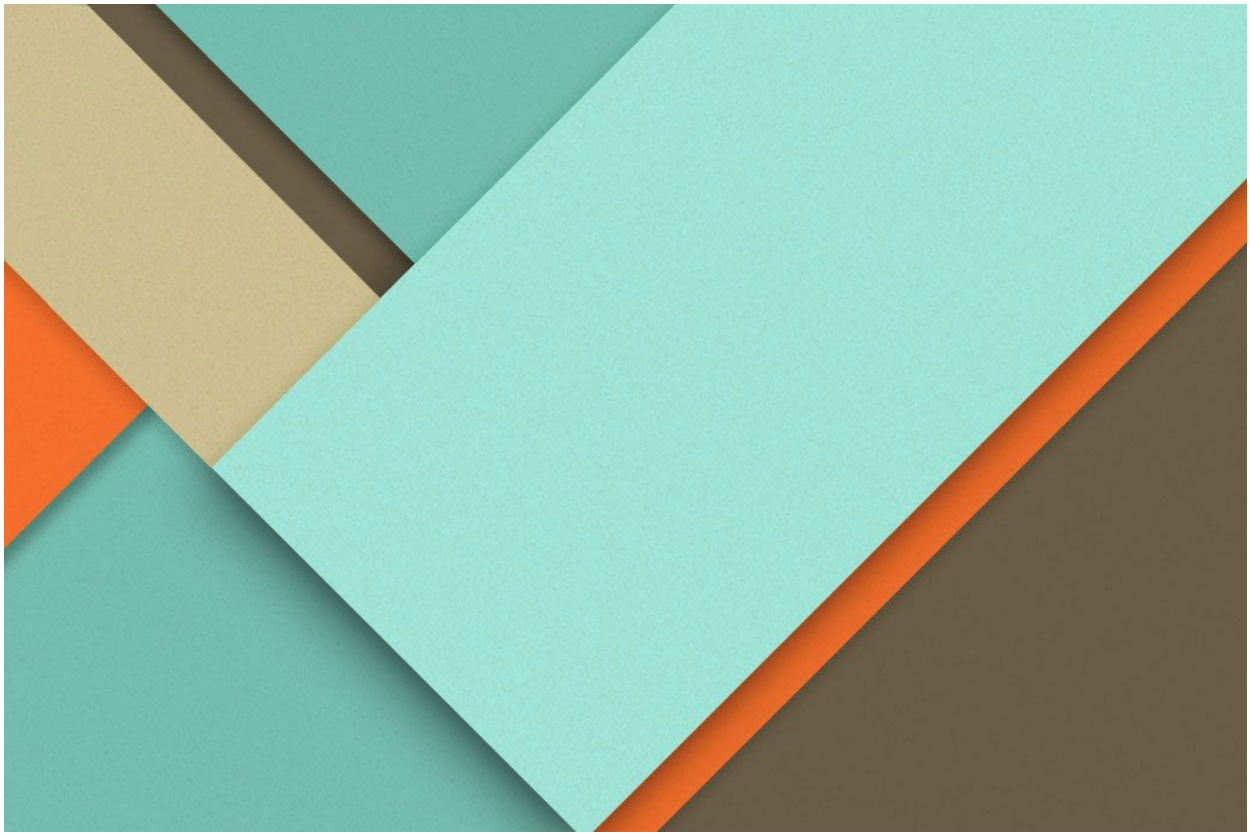


Histogram & Image interpolation (Task 1)

18.12.2016

Team Members

Rana Saad

Karim Eissa

Karim Magdy

Mohamed Samy

Contents

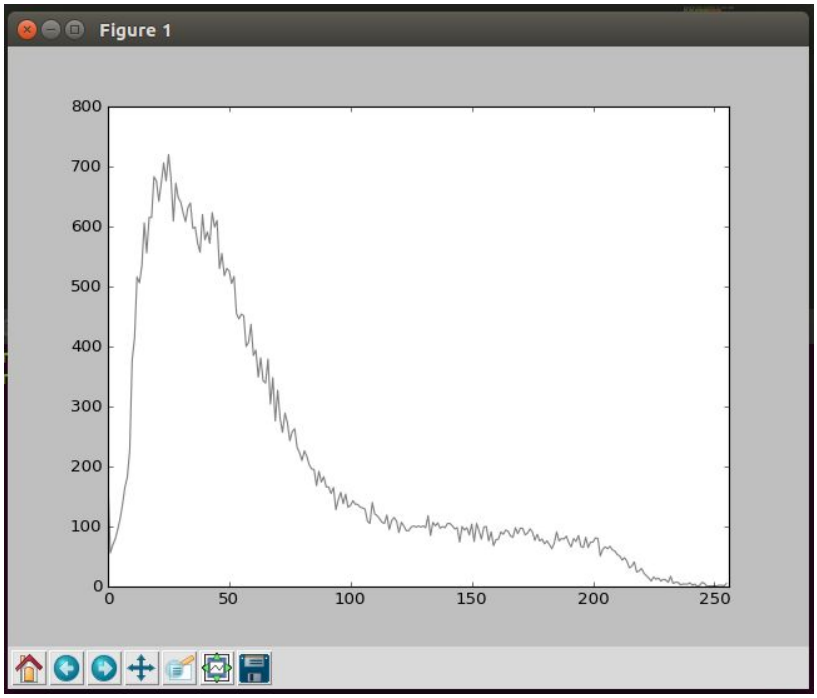
Histogram

(File code name : “ GrayHistoram.py “)

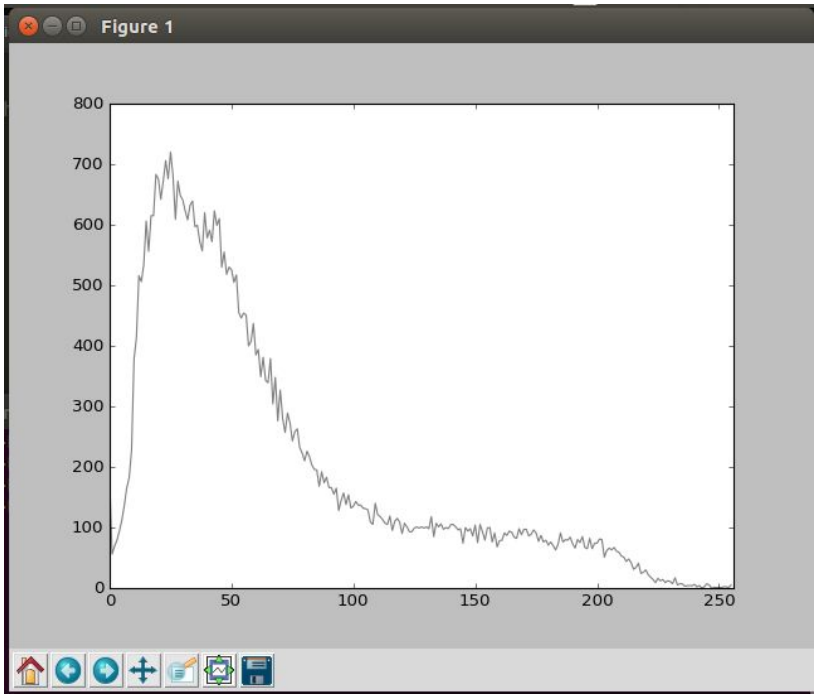
- On 1st Gray Image **“ GraySpace.png ”**

Image

Results from Manual Histogram



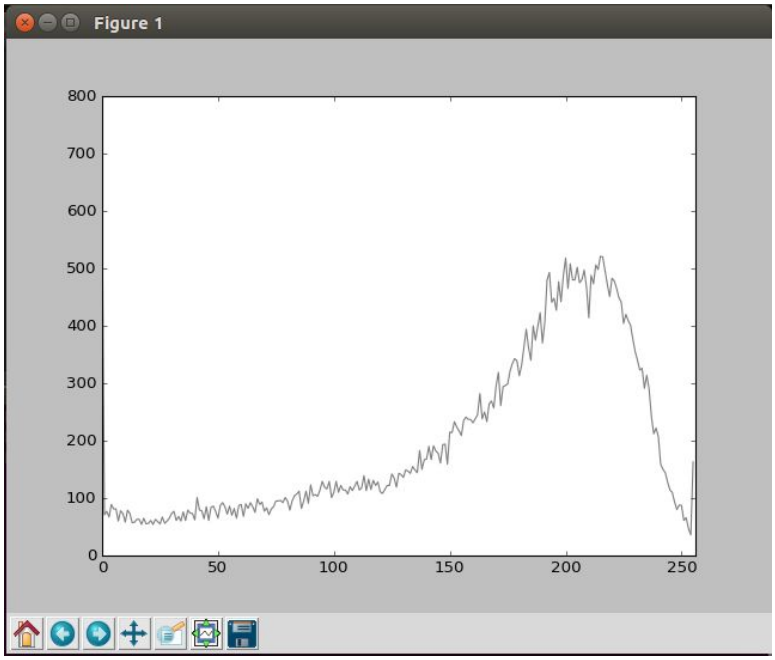
Results from Ready Histogram function



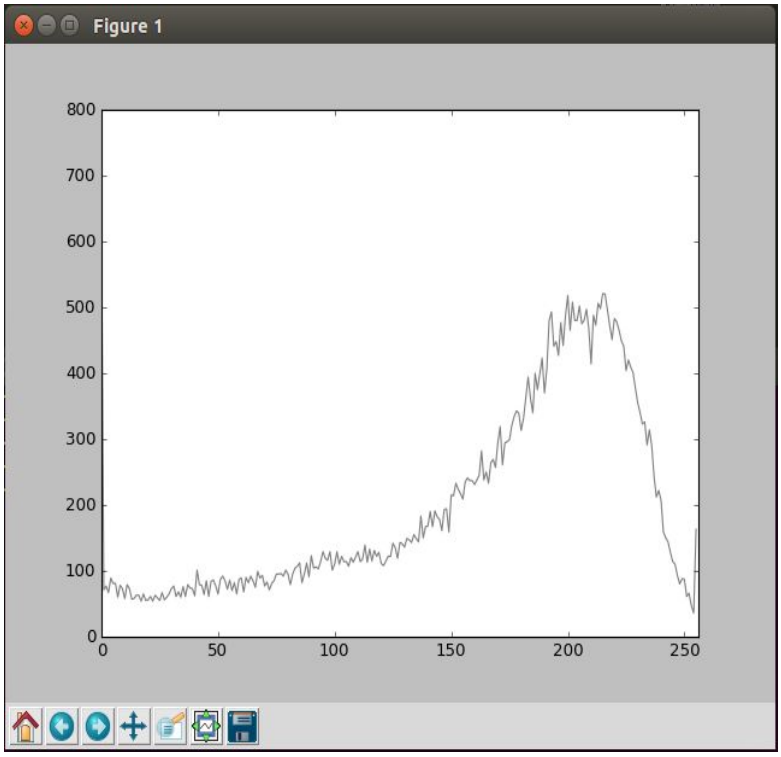
- On 2nd Gray Image **" stones.jpg"**

Image

Results from Manual Histogram



Results from Ready Histogram function

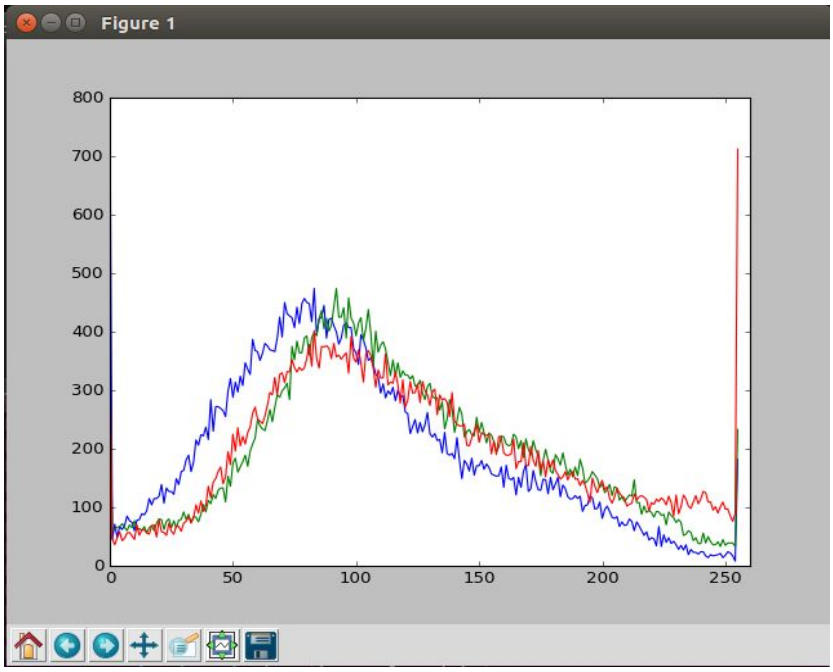


(File code name : " coloredHistoram.py ")

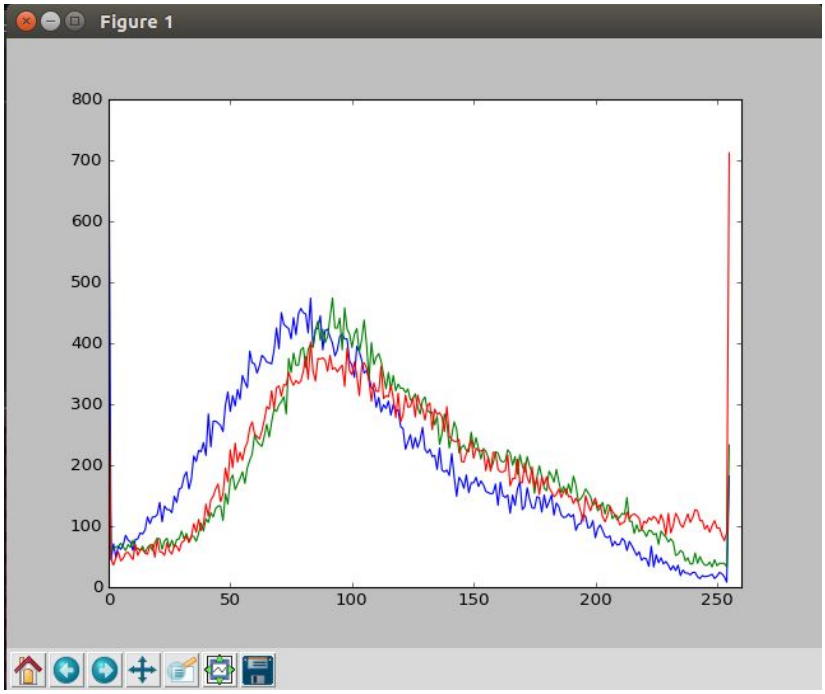
- On colored Image **" tiger.jpg "**.

Image

Results from Manual Histogram



Results from Ready Histogram function

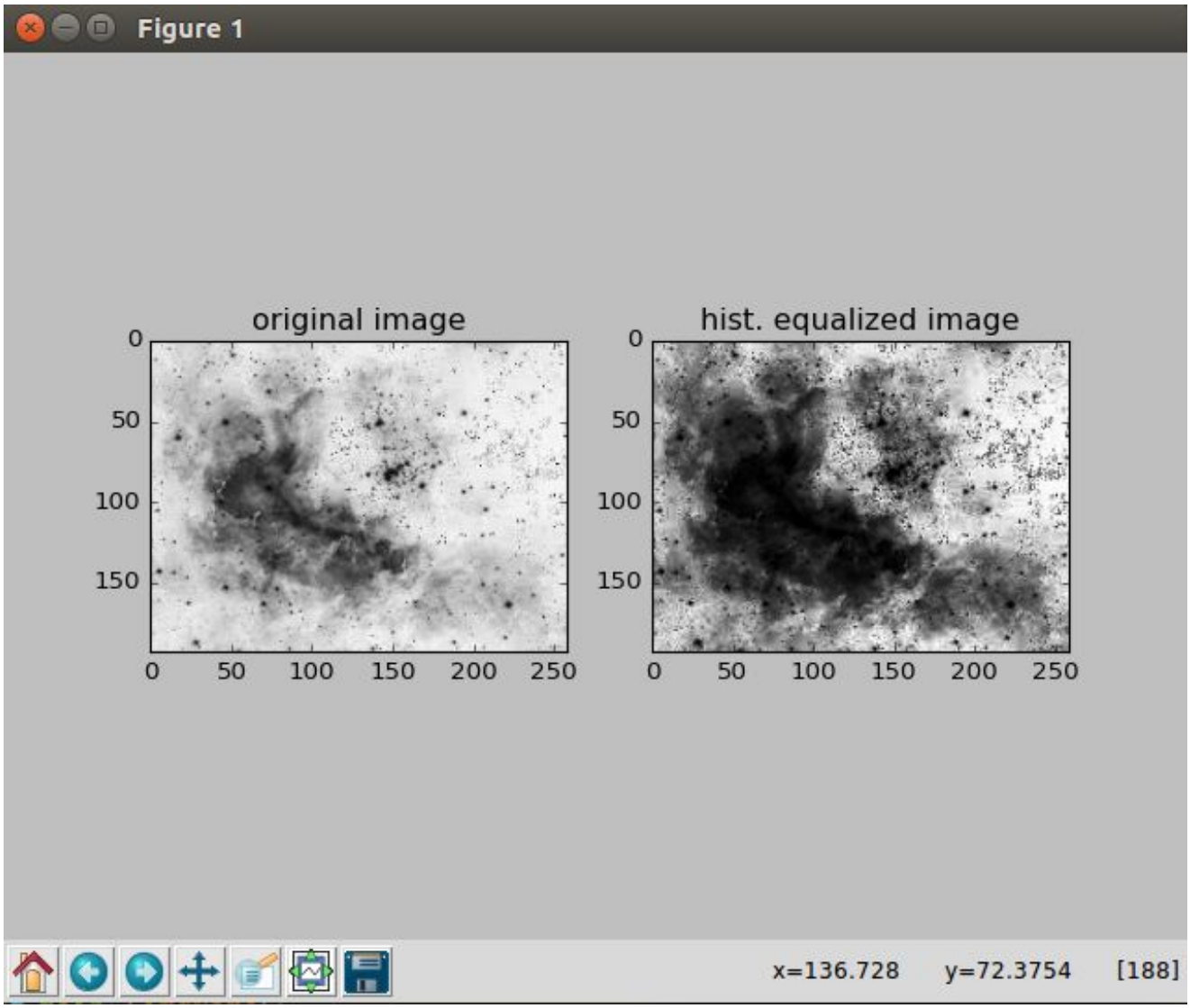


Histogram Equalization

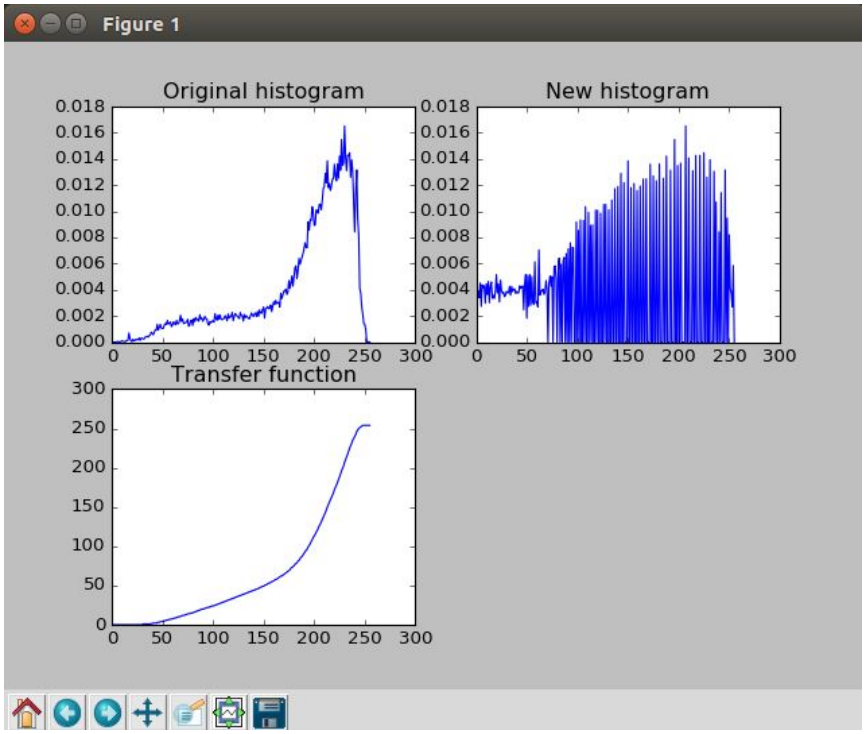
(File code name : “ grayEqualization.py “)

- On 1st Gray Image **“ GraySpace.png ”**

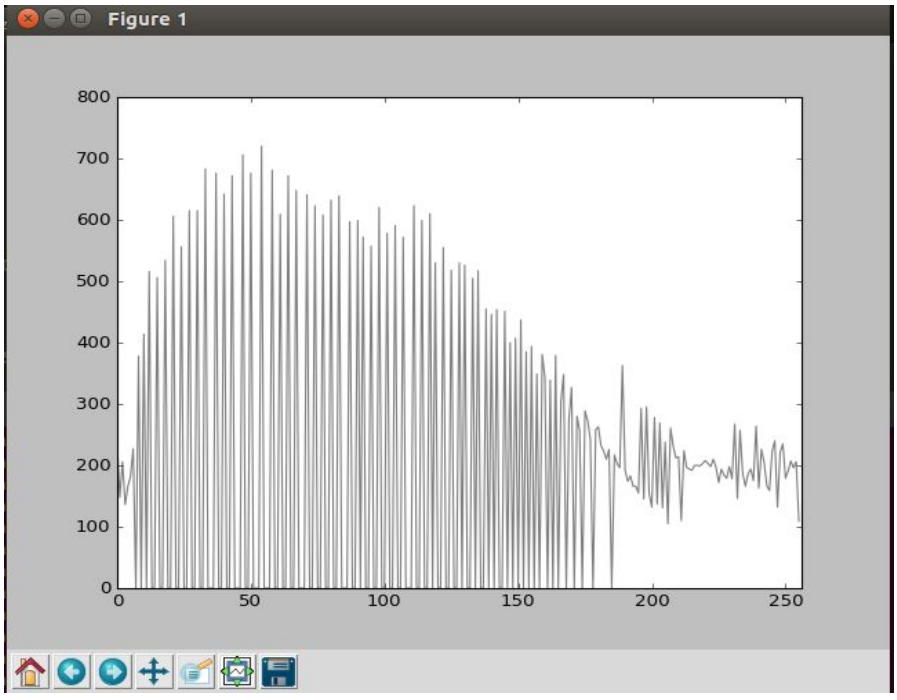
Image



Results from Manual Histogram Equalization

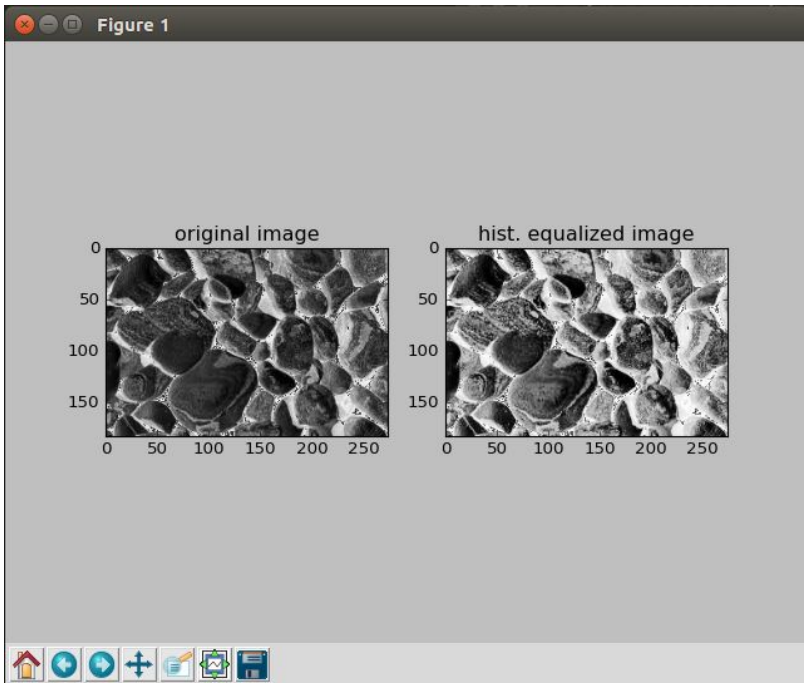


Results from Ready Histogram Equalization function

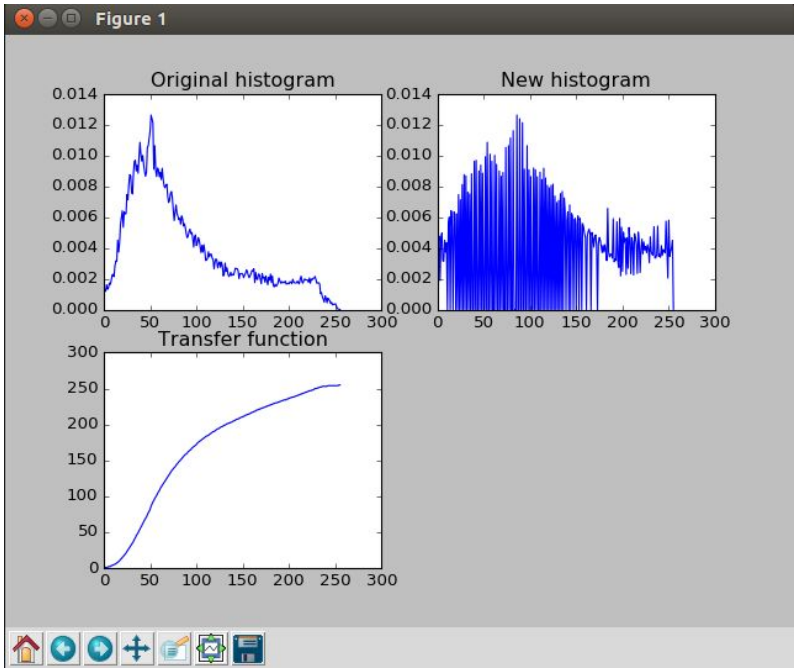


- On 2nd Gray Image **" stones.jpg"**

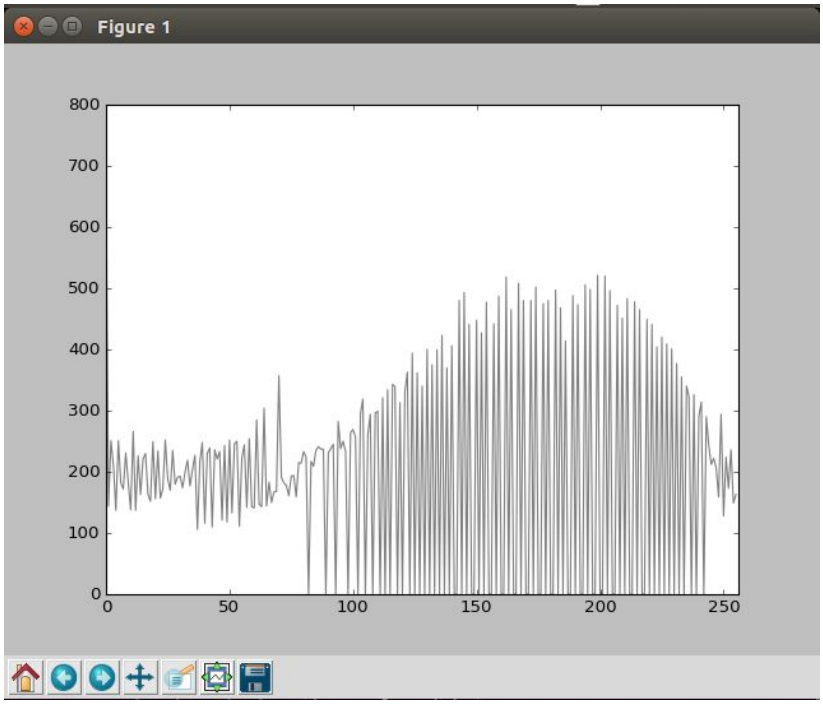
Image



Results from Manual Histogram Equalization



Results from Ready Histogram Equalization function

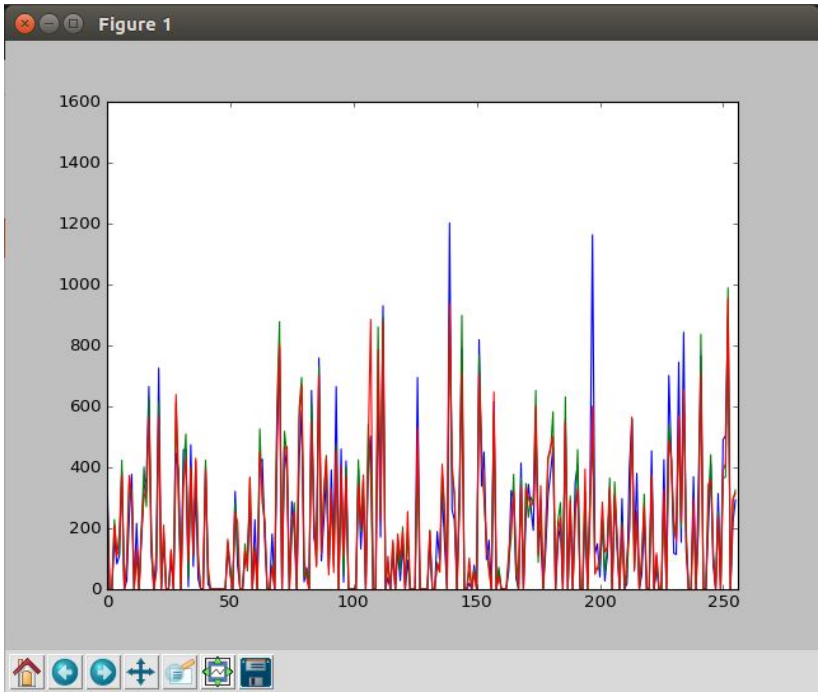


(File code name : " coloredEqualization.py ")

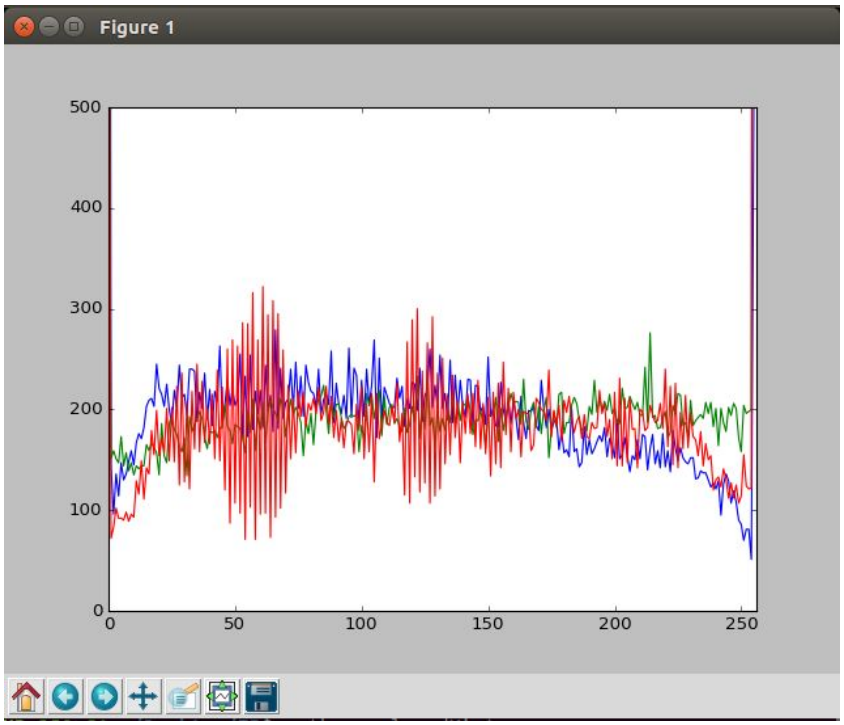
- On colored Image **" tiger.jpg "**.

Image

Results from Manual Histogram Equalization



Results from Ready Histogram Equalization function

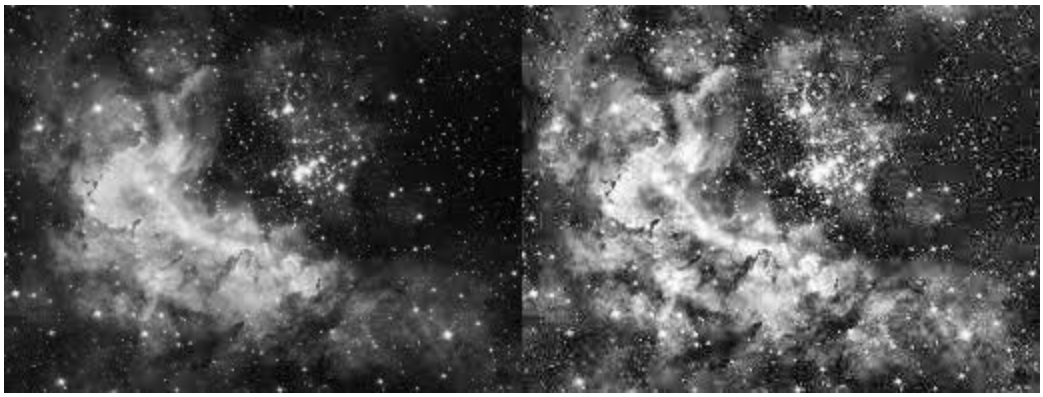


Adaptive Histogram

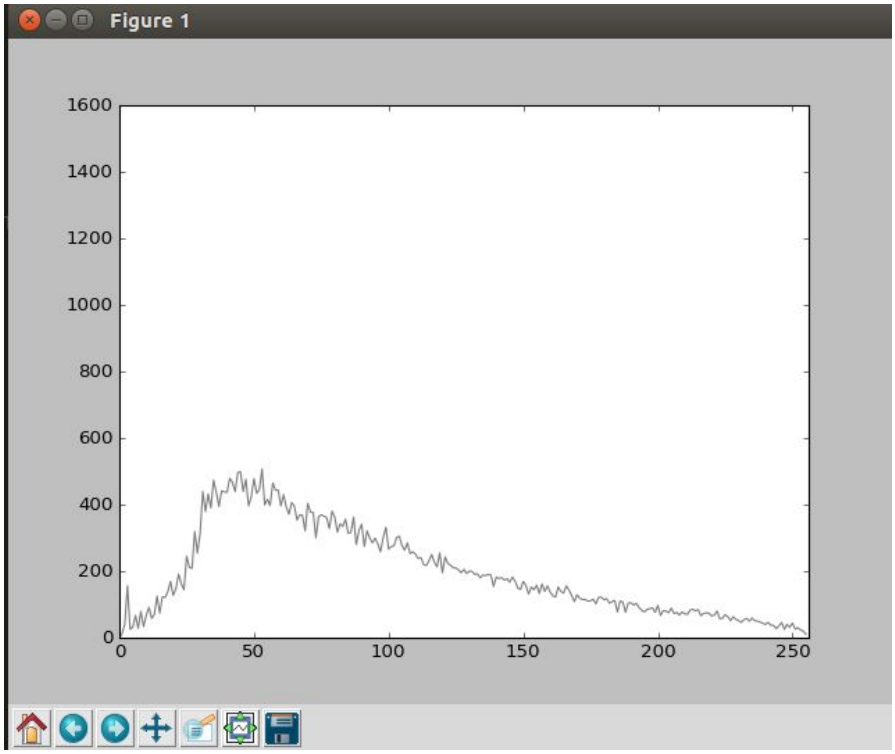
(File code name : “ GrayAdaptiveEqualization.py “)

- On 1st Gray Image **“ GraySpace.png ”**

Results from Histogram Adaptation function



Adapted Image Histogram



- On 2nd Gray Image **" stones.jpg"**

Results from Histogram Adaptation function

Adapted Image Histogram

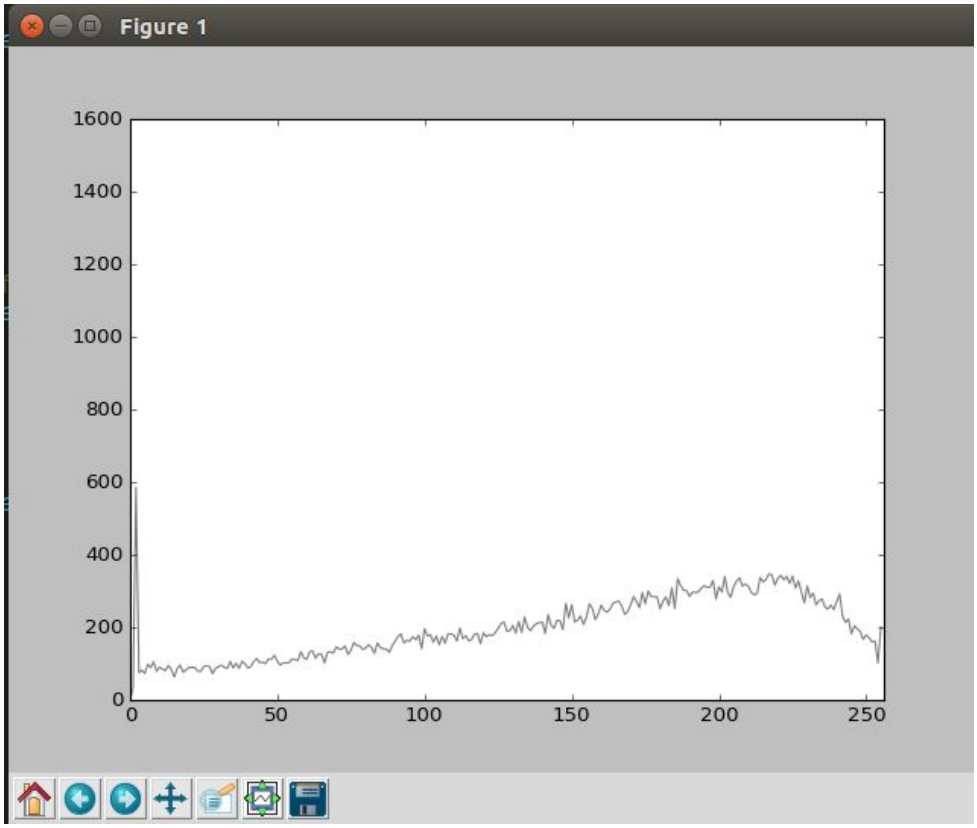


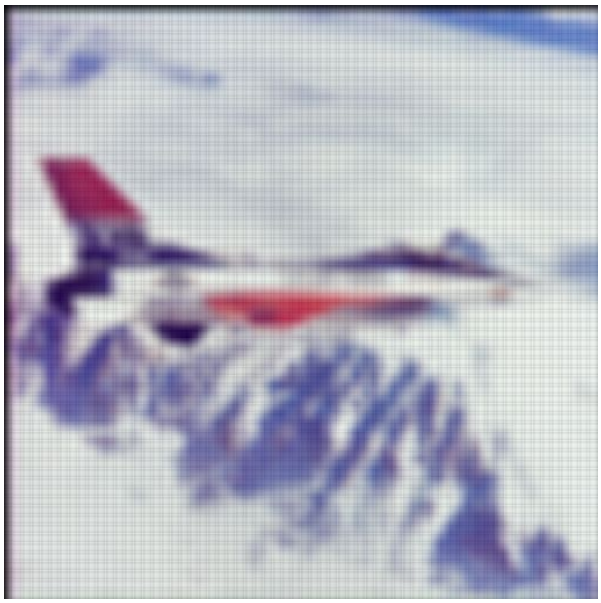
Image Interpolation

- Image **" airplane.png"**.

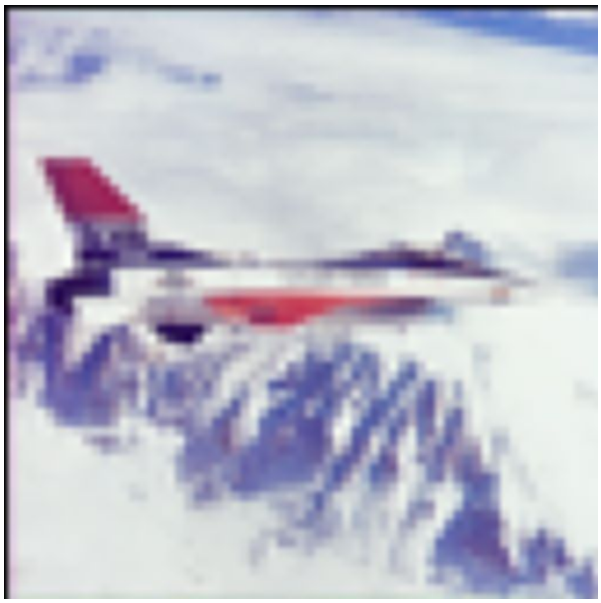
Original	Bilinear
	
Bi-cubical	**Lanczos**

Bell

Hermite

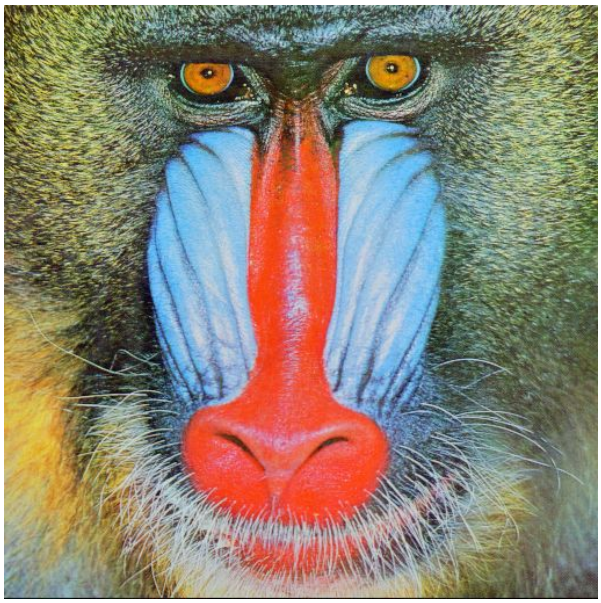


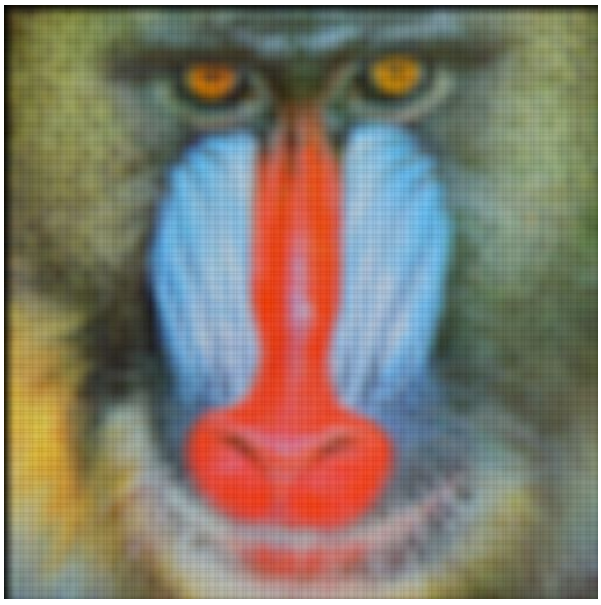
Nearest

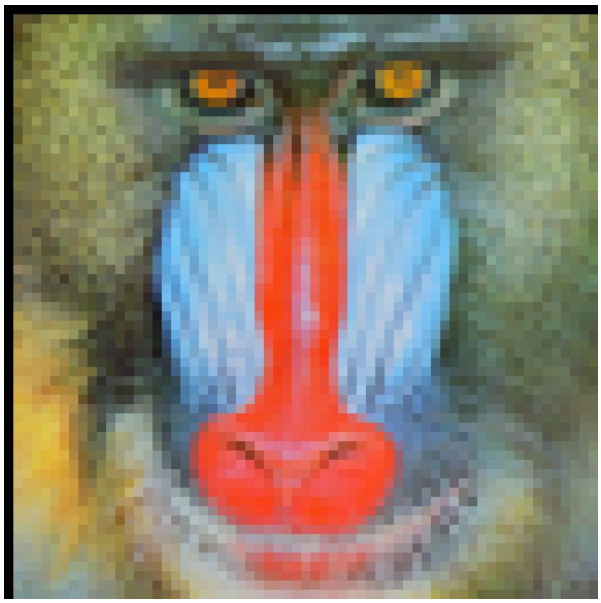


Edge Sensitive

- Image **" baboon.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**

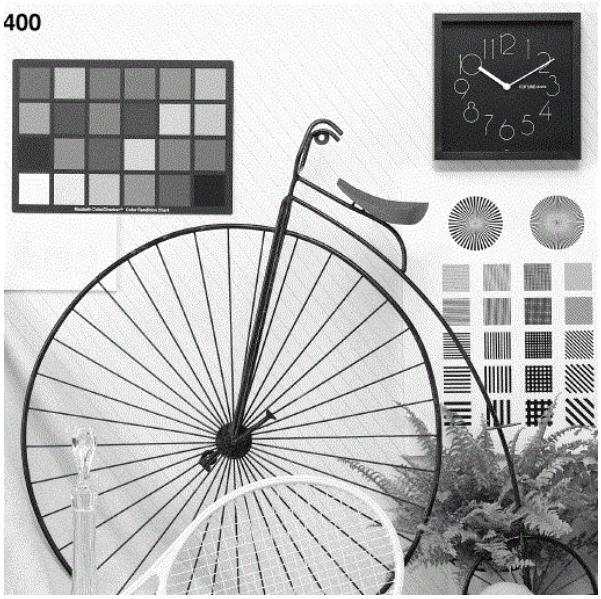
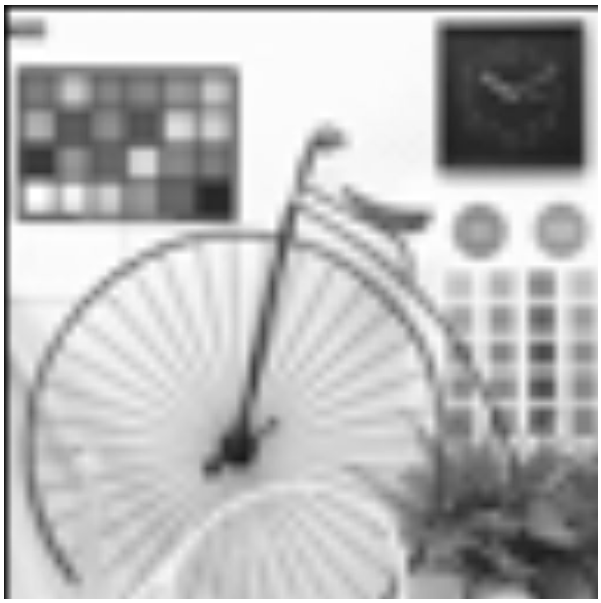


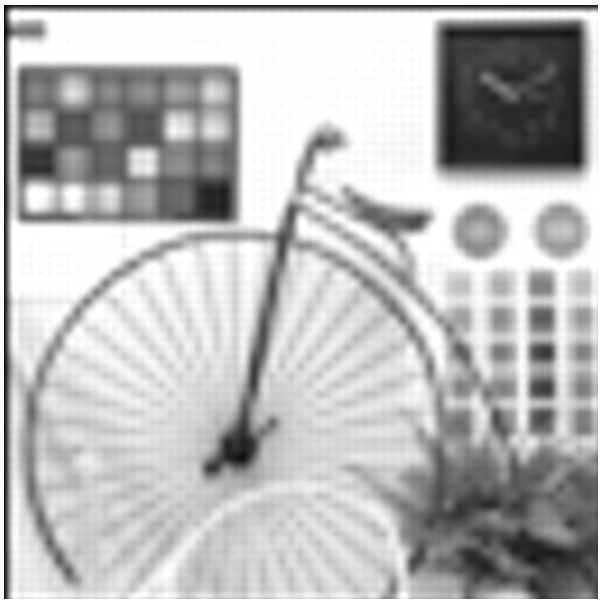
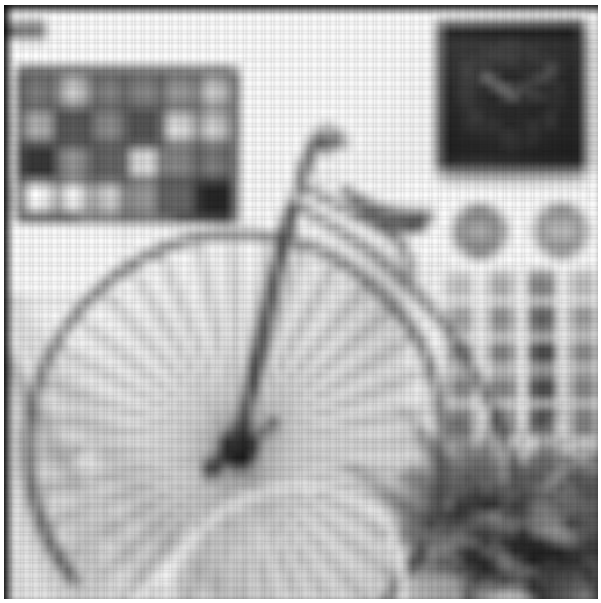
- Image **" barbara.png"**.

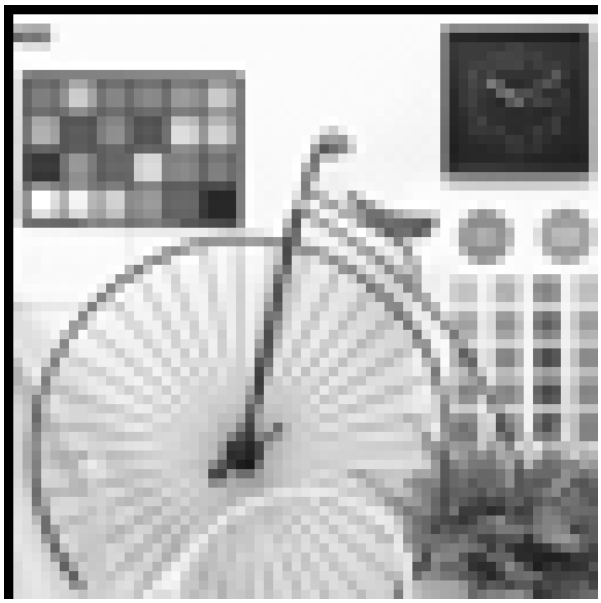
Original	Bilinear
	
Bi-cubical	**Lanczos**

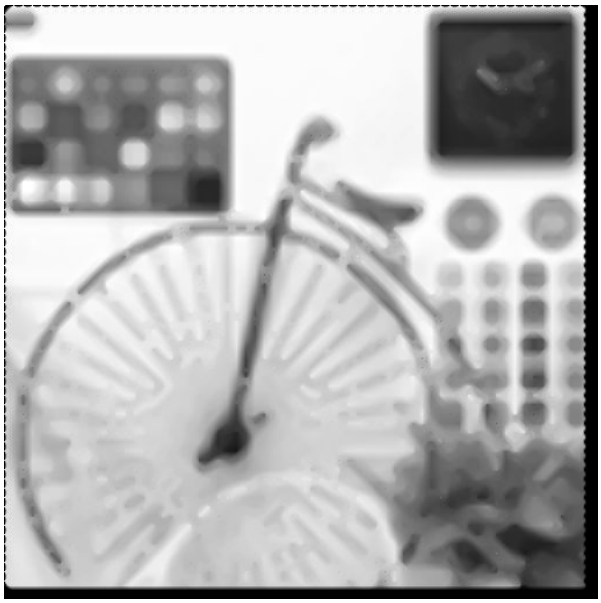
	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**

- Image **" bike.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**



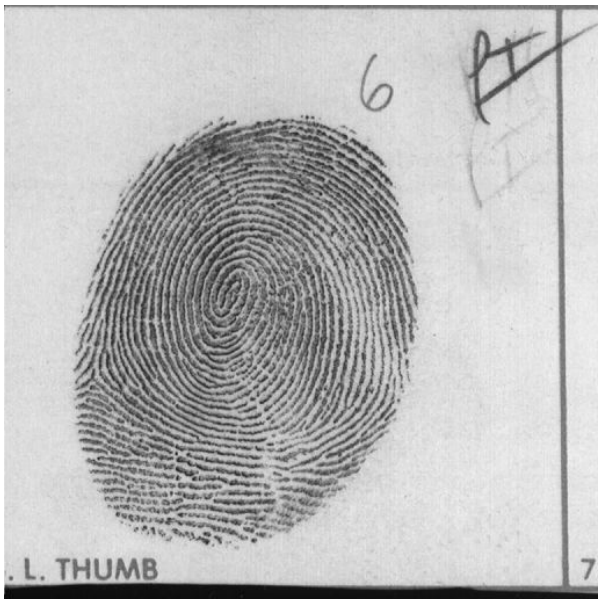
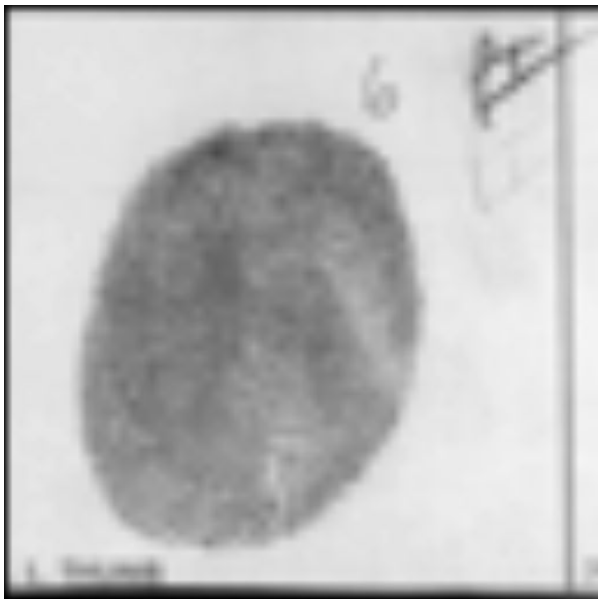


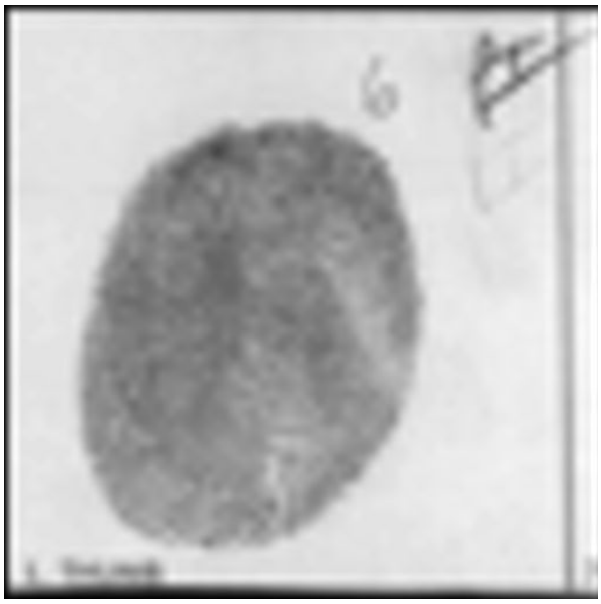
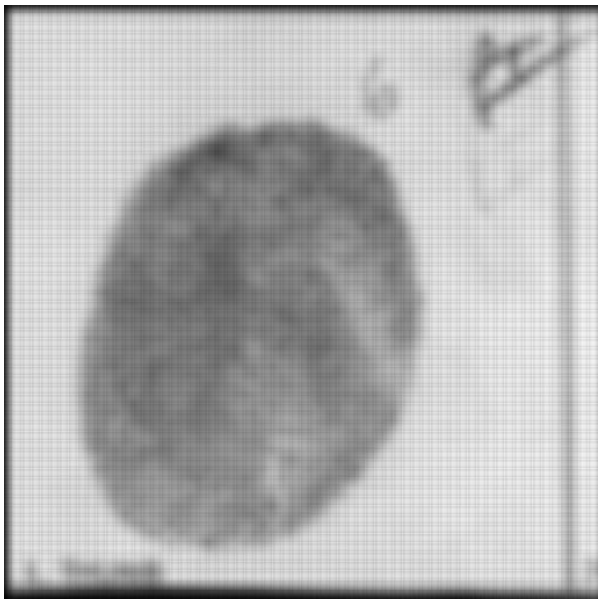
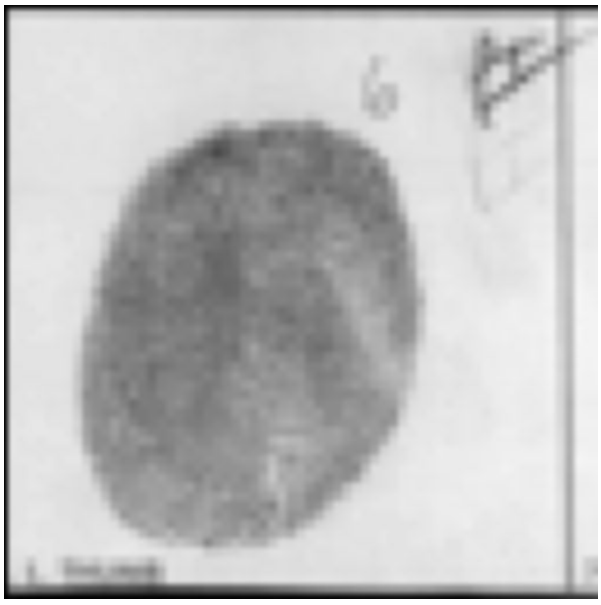
- Image **" boat.png"**.

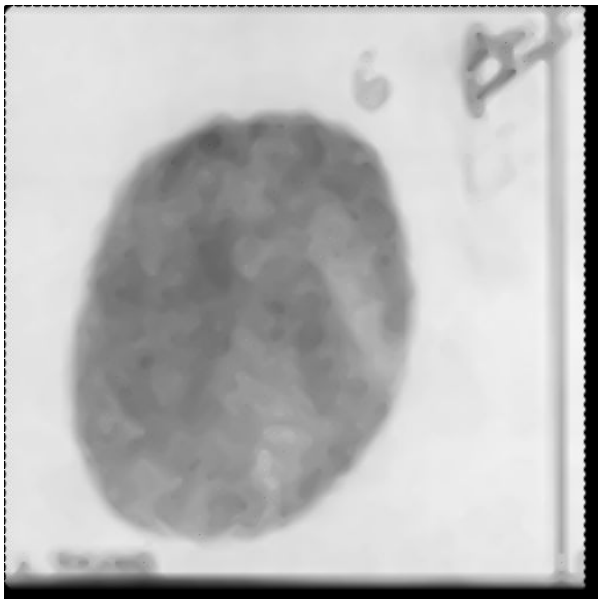
Original	Bilinear
	
Bi-cubical	**Lanczos**

	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**

- Image **" fprint3.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

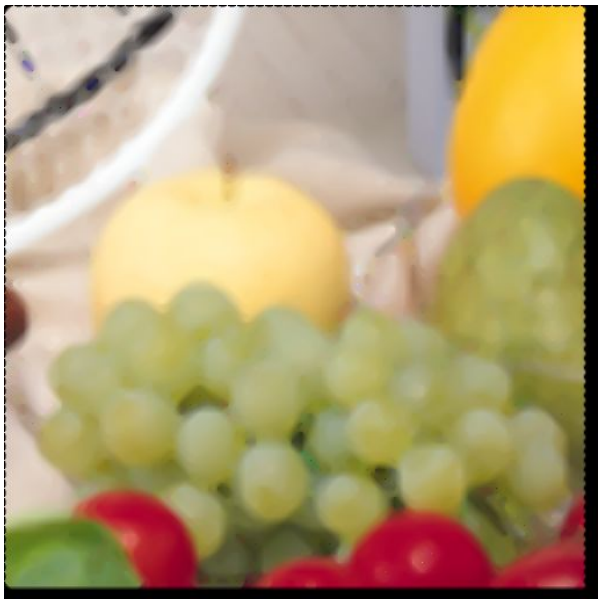
	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**



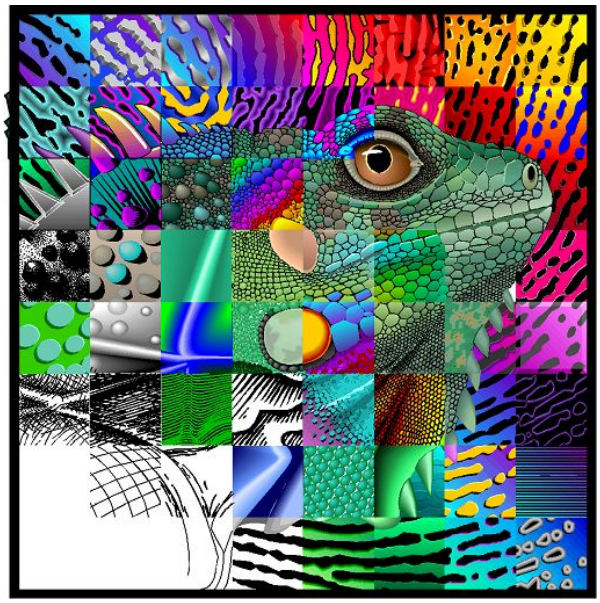
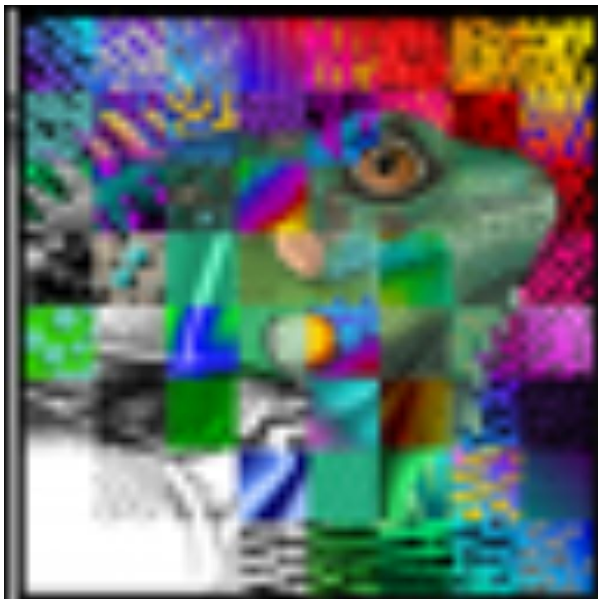
- Image **" fruits.png"**.

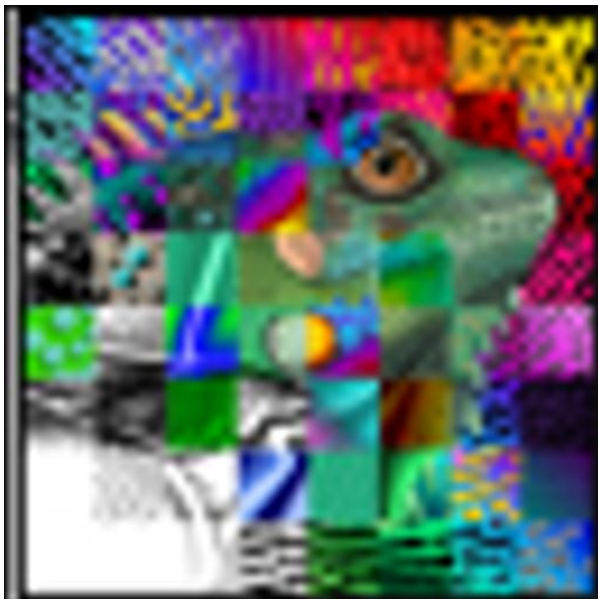
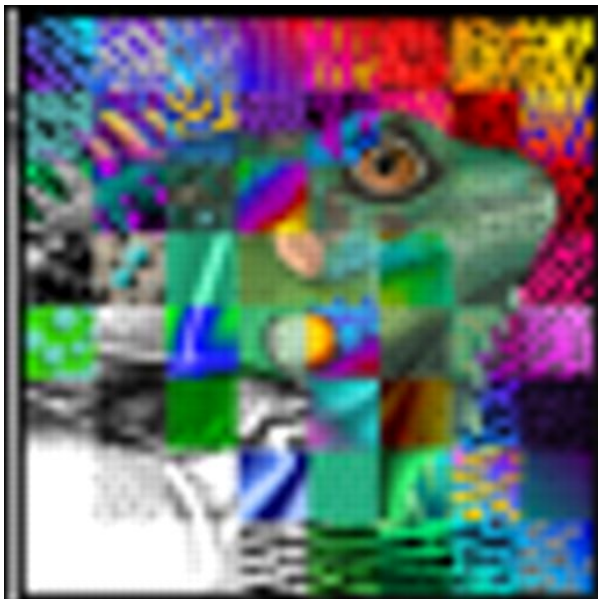
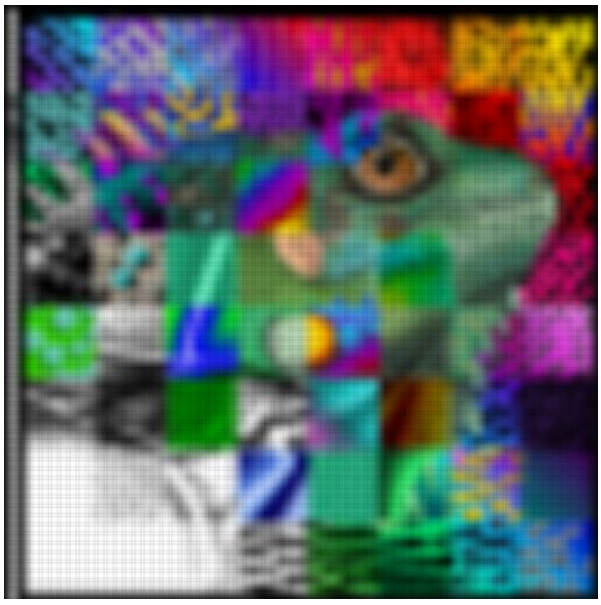
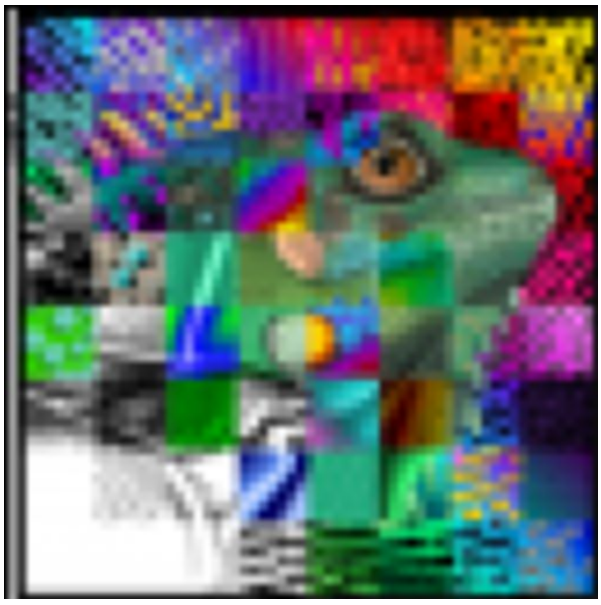
Original	Bilinear
	
Bi-cubical	**Lanczos**

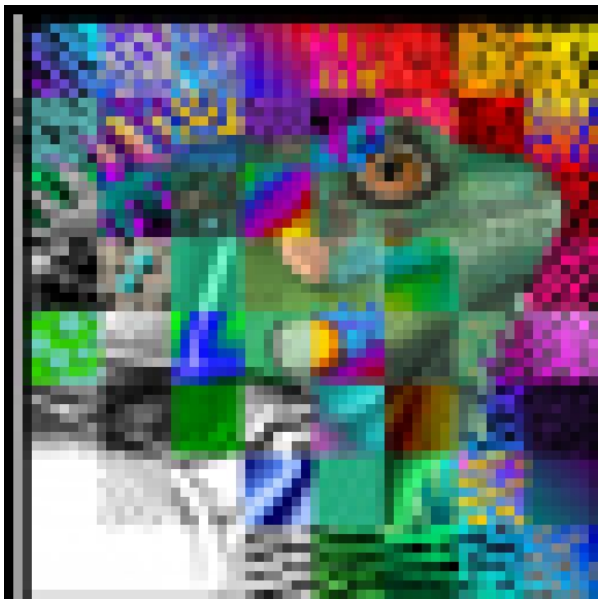
	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**

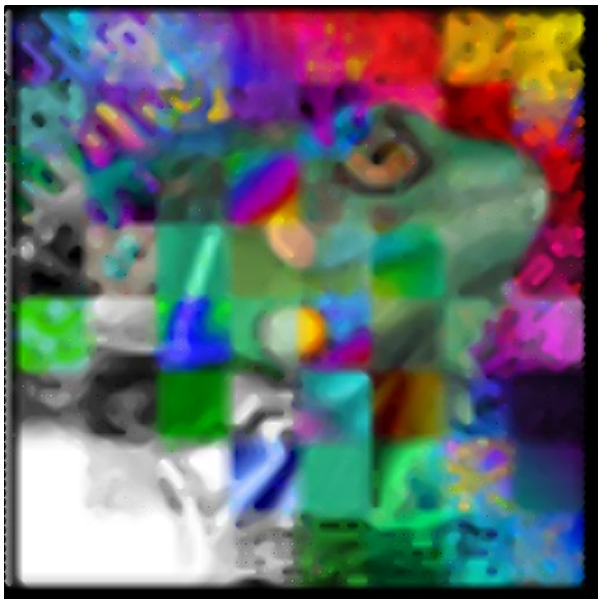


- Image **" frymire.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**





- Image **" goldhill.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

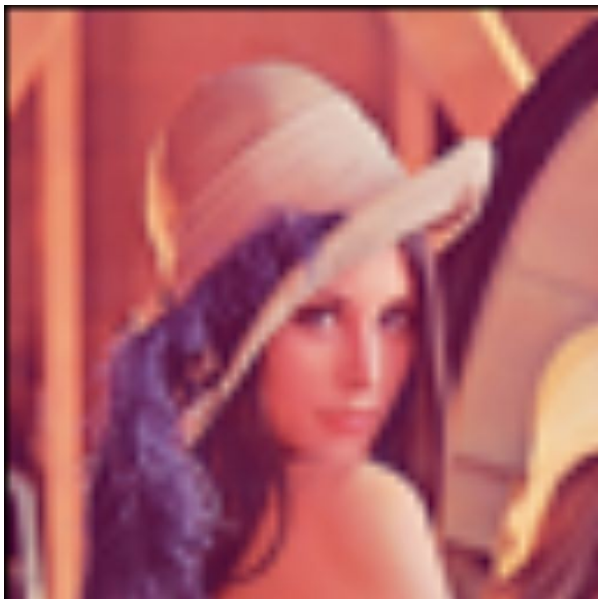
Bell

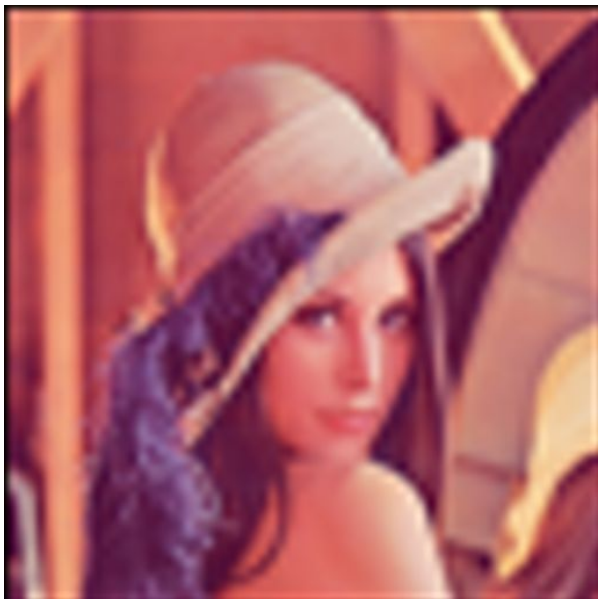
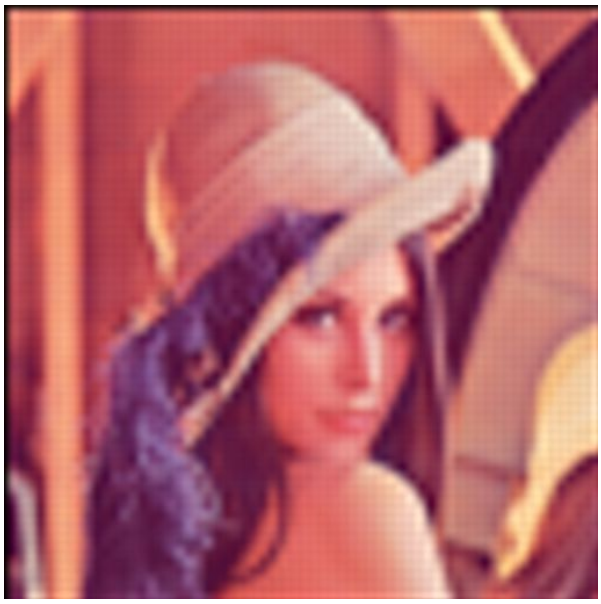
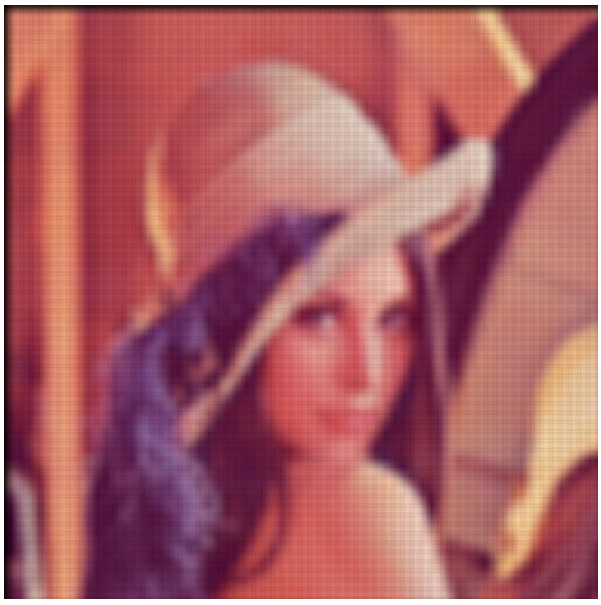
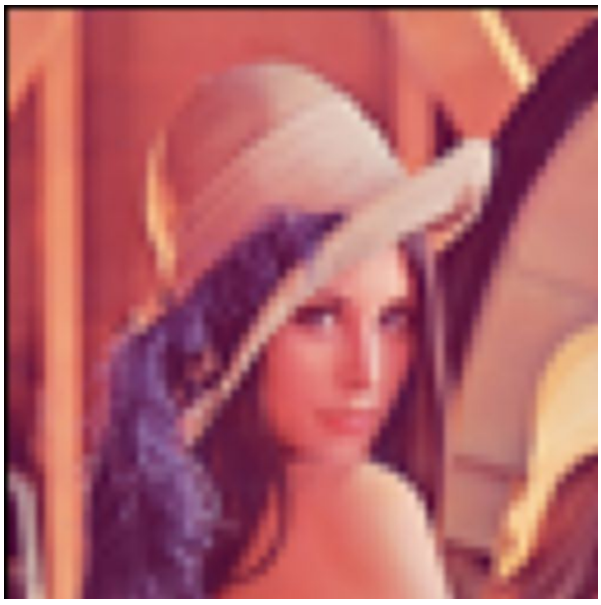
Hermite

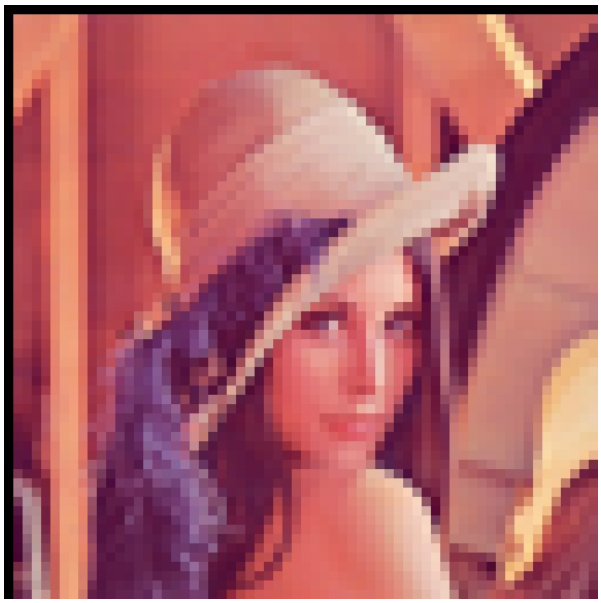
Nearest

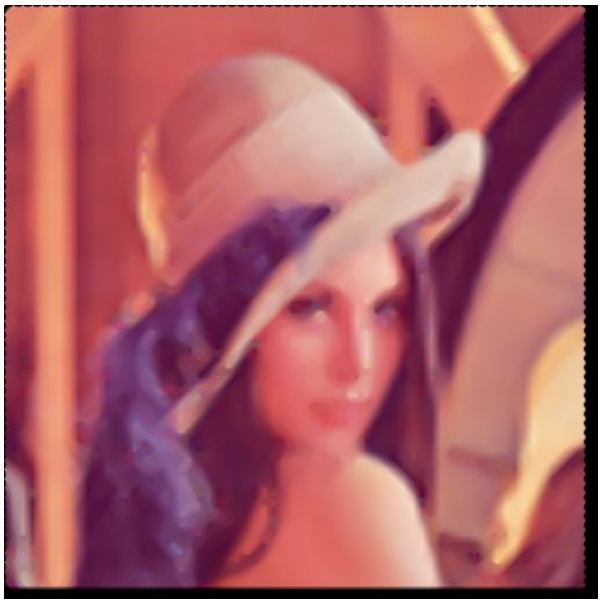
Edge Sensitive

- Image **" lena.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**





- Image **" peppers.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

Bell

Hermite

Nearest

Edge Sensitive

- Image **" zelda.png"**.

Original	Bilinear
	
Bi-cubical	**Lanczos**

	
Bell	**Hermite**
	
Nearest	**Edge Sensitive**