

File: Koala.jpg

Original:



K = 2



Compression Values for 5 runs:

FileName: Koala.jpg K:2 Compression: 5.871351229415746

FileName: Koala.jpg K:2 Compression: 5.914893455848376

FileName: Koala.jpg K:2 Compression: 5.871351229415746

FileName: Koala.jpg K:2 Compression: 5.90818017418149

FileName: Koala.jpg K:2 Compression: 5.870689071839404

Mean and Variance:

Mean for K value of 2 is: 5.8872930321401515

Variance for K value of 2 is: 0.000396

K = 5



Compression Values:

FileName: Koala.jpg K:5 Compression: 4.411374884183409

FileName: Koala.jpg K:5 Compression: 4.415915440386377

FileName: Koala.jpg K:5 Compression: 4.422217817296256

FileName: Koala.jpg K:5 Compression: 4.471524369642029

FileName: Koala.jpg K:5 Compression: 4.43334071437088

Mean and Variance:

Mean for K value of 5 is: 4.430874645175789

Variance for K value of 5 is: 0.000467

K = 10



Compression Values:

FileName: Koala.jpg K:10 Compression: 4.755307487119524

FileName: Koala.jpg K:10 Compression: 4.758698235670536

FileName: Koala.jpg K:10 Compression: 4.702016704503713

FileName: Koala.jpg K:10 Compression: 4.652095683517531

FileName: Koala.jpg K:10 Compression: 4.721977975459752

Mean and Variance:

Mean for K value of 10 is: 4.718019217254211

Variance for K value of 10 is: 0.001533

K = 15



Compression Values:

FileName: Koala.jpg K:15 Compression: 4.896198197859253

FileName: Koala.jpg K:15 Compression: 4.855370667462598

FileName: Koala.jpg K:15 Compression: 4.857273490715685

FileName: Koala.jpg K:15 Compression: 4.890096194794459

FileName: Koala.jpg K:15 Compression: 4.9008692923270045

Mean and Variance:

Mean for K value of 15 is:4.8799615686318

Variance for K value of15 is: 0.000385

K = 20



Compression Values:

FileName: Koala.jpg K:20 Compression: 5.049281566456719

FileName: Koala.jpg K:20 Compression: 4.917722116904629

FileName: Koala.jpg K:20 Compression: 4.97944021784186

FileName: Koala.jpg K:20 Compression: 4.973160774223134

FileName: Koala.jpg K:20 Compression: 4.9843352036615025

Mean and Variance:

Mean for K value of 20 is:4.980787975817568

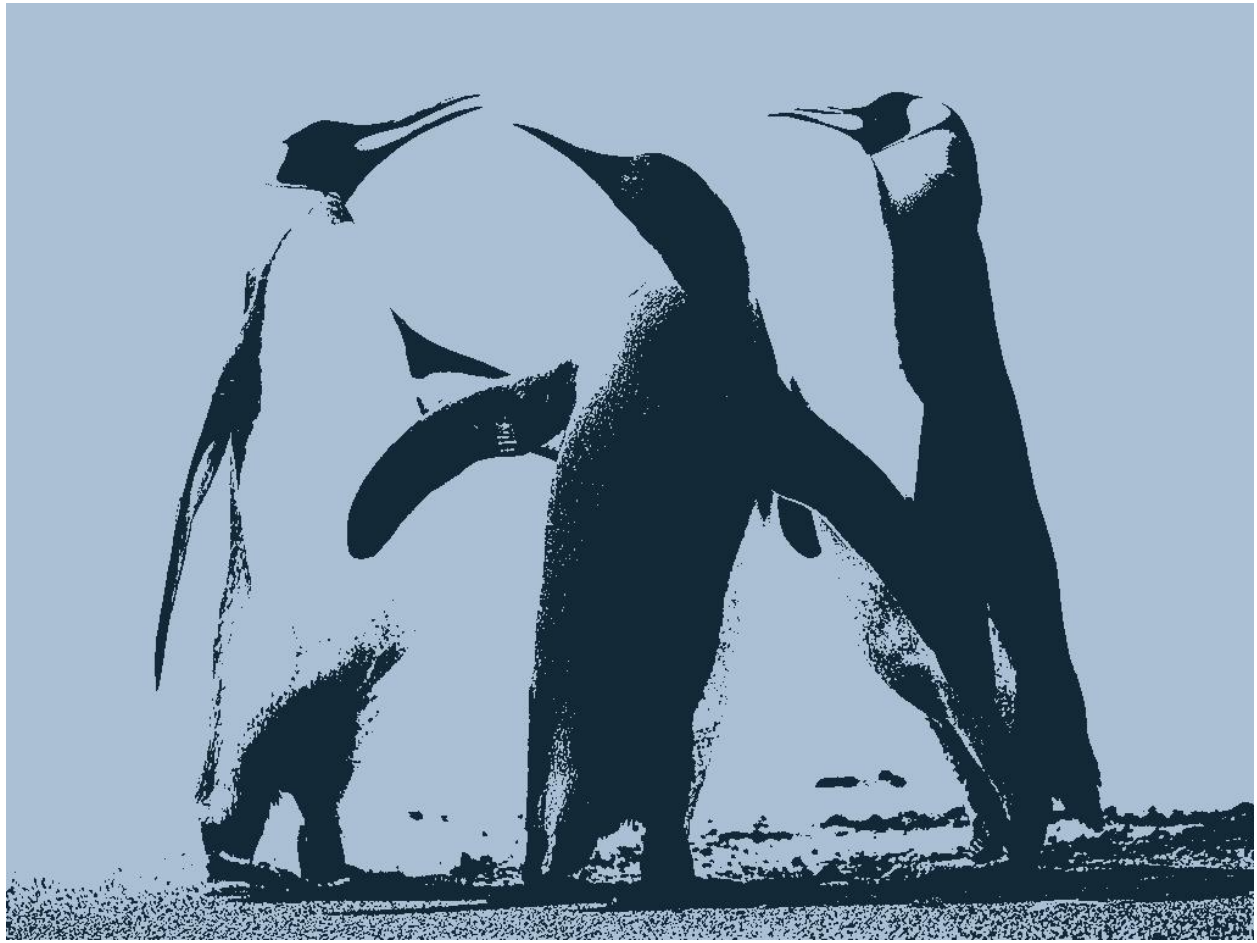
Variance for K value of 20 is: 0.001748

File: Penguins.jpg

Original:



K = 2



Compression Values:

FileName: Penguins.jpg K:2 Compression: 9.133056230699685

FileName: Penguins.jpg K:2 Compression: 9.133056230699685

FileName: Penguins.jpg K:2 Compression: 9.133056230699685

FileName: Penguins.jpg K:2 Compression: 9.133056230699685

FileName: Penguins.jpg K:2 Compression: 9.133056230699685

Mean and Variance:

Mean for K value of 2 is: 9.133056230699685

Variance for K value of 2 is: 0.000000

K = 5



Compression Values:

FileName: Penguins.jpg K:5 Compression: 7.547179880267409
FileName: Penguins.jpg K:5 Compression: 7.3465214681047994
FileName: Penguins.jpg K:5 Compression: 7.45502554223334
FileName: Penguins.jpg K:5 Compression: 7.349436864582939
FileName: Penguins.jpg K:5 Compression: 7.365512996543724

Mean and Variance:

Mean for K value of 5 is: 7.412735350346442
Variance for K value of 5 is: 0.006097

K = 10



Compression Values:

FileName: Penguins.jpg K:10 Compression: 6.575828282059736
FileName: Penguins.jpg K:10 Compression: 6.542256127306676
FileName: Penguins.jpg K:10 Compression: 6.7190280393206985
FileName: Penguins.jpg K:10 Compression: 6.619477988545364
FileName: Penguins.jpg K:10 Compression: 6.682373862767502

Mean and Variance:

Mean for K value of 10 is: 6.627792859999995
Variance for K value of 10 is: 0.004278

K = 15



Compression Values:

FileName: Penguins.jpg K:15 Compression: 6.759844264645815

FileName: Penguins.jpg K:15 Compression: 6.516277394276523

FileName: Penguins.jpg K:15 Compression: 6.67119798277814

FileName: Penguins.jpg K:15 Compression: 6.67394549885026

FileName: Penguins.jpg K:15 Compression: 6.651914755332068

Mean and Variance:

Mean for K value of 15 is: 6.654635979176561

Variance for K value of 15 is: 0.006173

K = 20



Compression Values:

FileName: Penguins.jpg K:20 Compression: 6.730772558928386

FileName: Penguins.jpg K:20 Compression: 6.56068657219973

FileName: Penguins.jpg K:20 Compression: 6.5870213234422375

FileName: Penguins.jpg K:20 Compression: 6.724953313044681

FileName: Penguins.jpg K:20 Compression: 6.576439852548277

Mean and Variance:

Mean for K value of 20 is: 6.635974724032662

Variance for K value of 20 is: 0.005703

Observations: A good value of K would be 15 and 20 for these images. It is seen that as the value of K increases compression (originalSize/outputSize) decreases.