Universidad Popular del Cesar

Tratamiento de Señales

Version 2024-I

Histogramas

[Capítulo 3]

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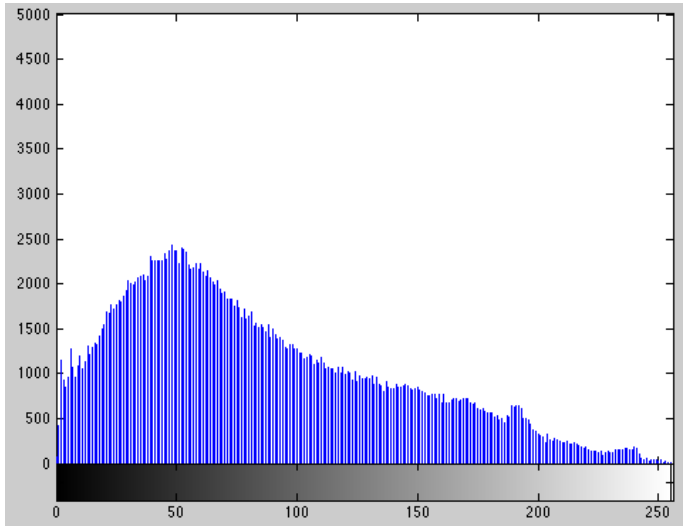
Ingenieria Electronica
Universidad Popular del Cesar

Image Histogram:

Representation that gives the number of pixels of the image for each grayvalue.

[IMAGE]



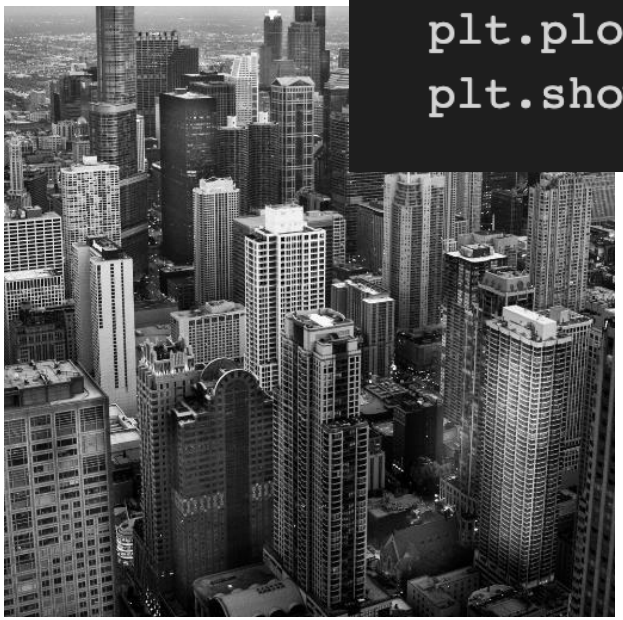
[HISTOGRAM]

Image Histogr

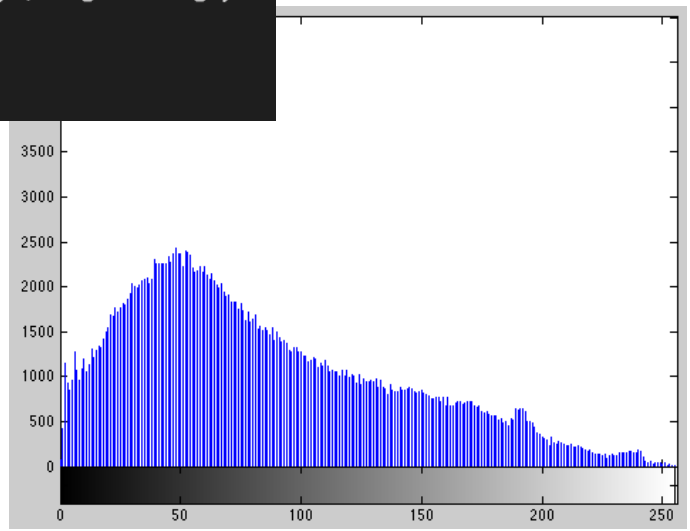
Representation ixels of the image for each

```
def imhist(X):
  (N,M) = X.shape
  n = 256
  h = np.zeros((256,))
  for i in range(N):
    for j in range(M):
      x = X[i,j]
      h[x] = h[x]+1
  plt.plot(range(n),h[0:n])
  plt.show()
```

x



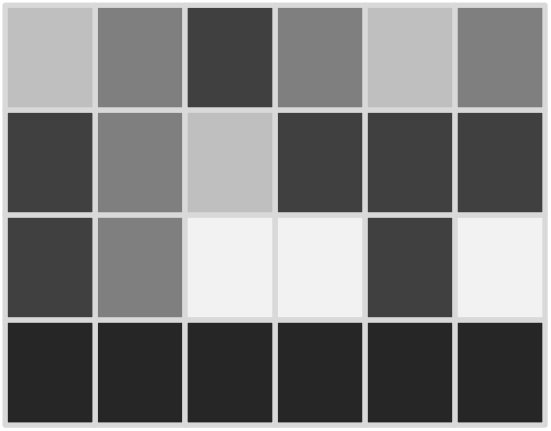
[IMAGE]

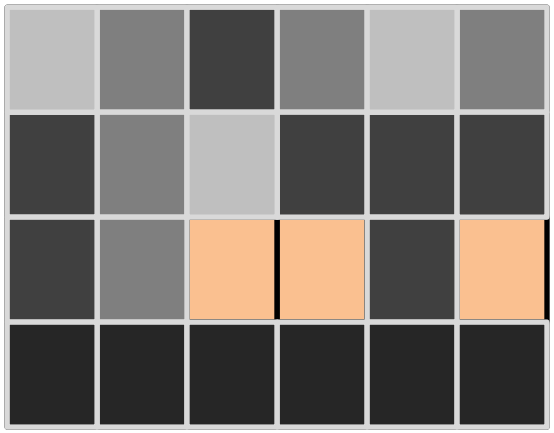


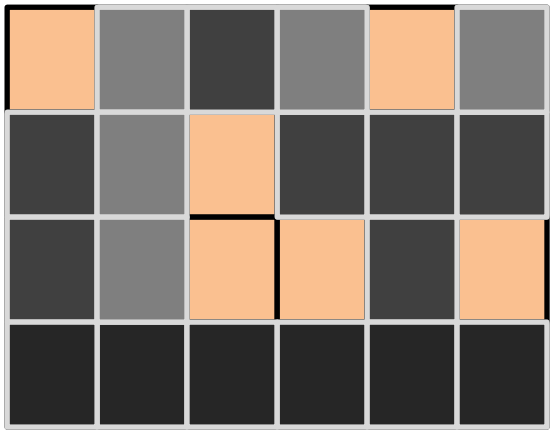
[HISTOGRAM]

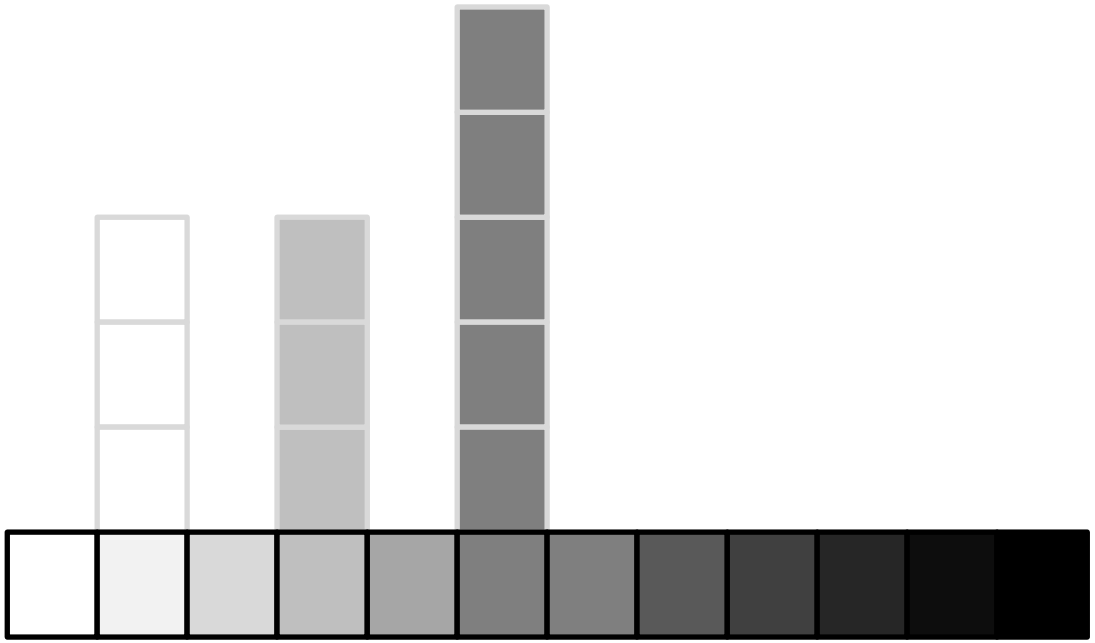
Example:

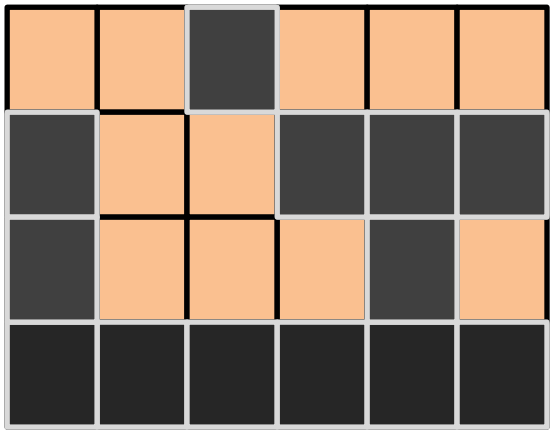
Image with 4x6 pixels and a grayscale with 12 grayvalues.

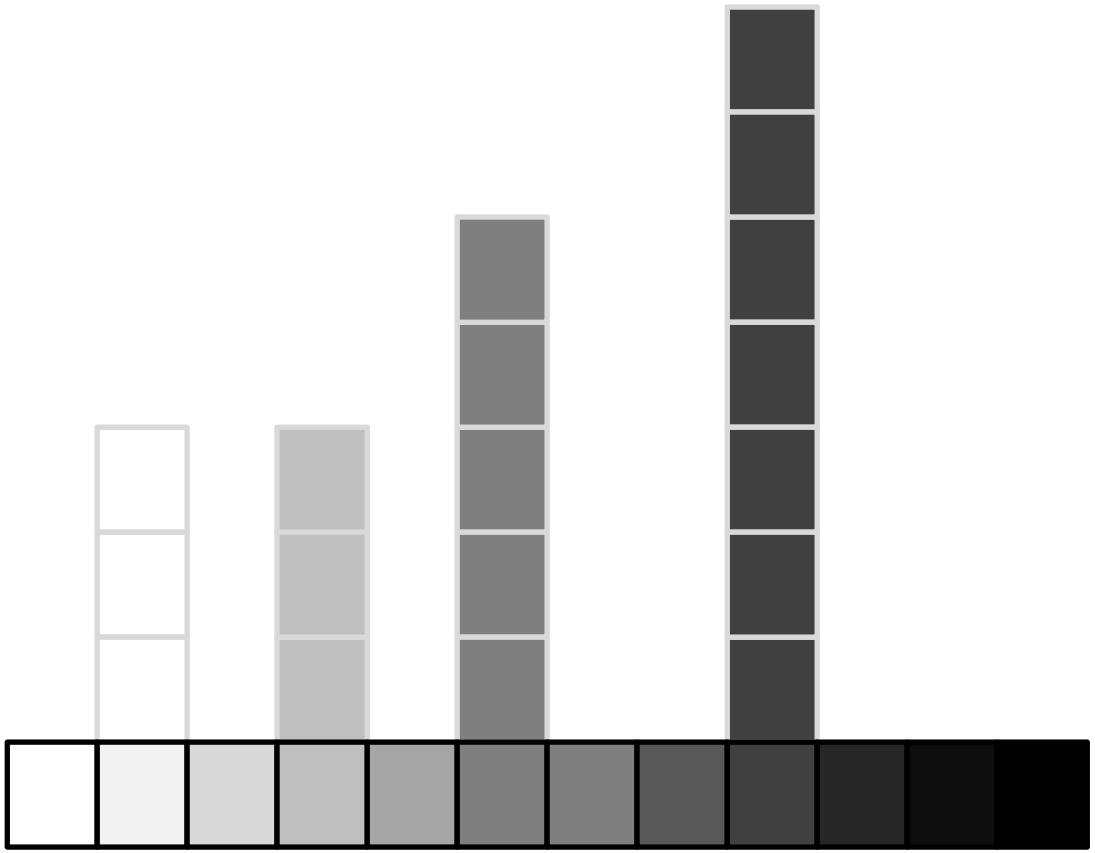


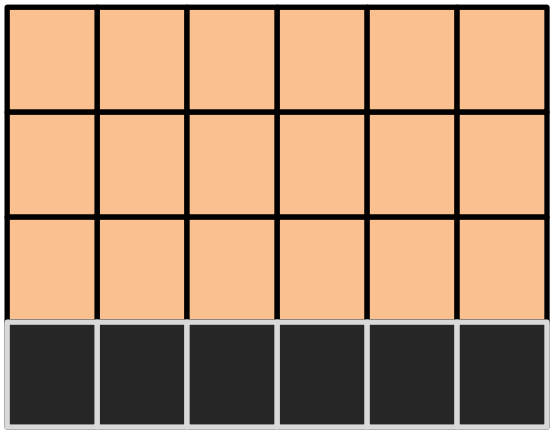


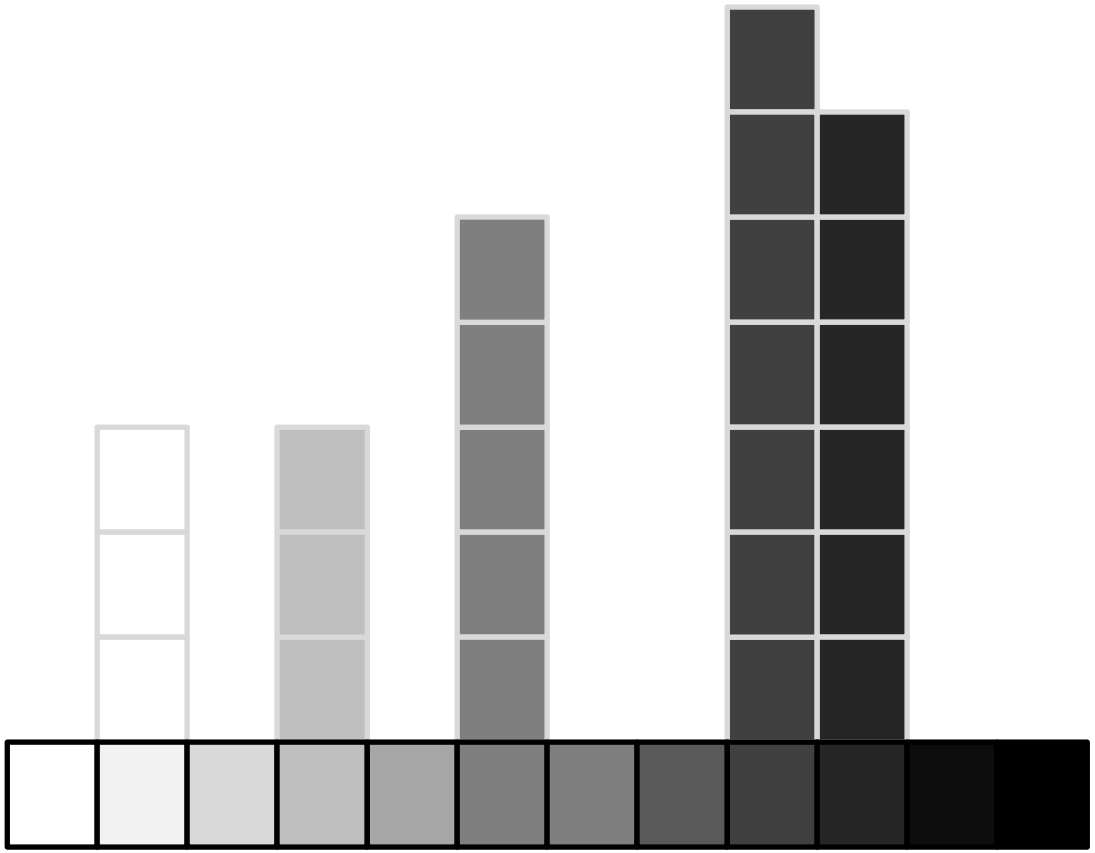


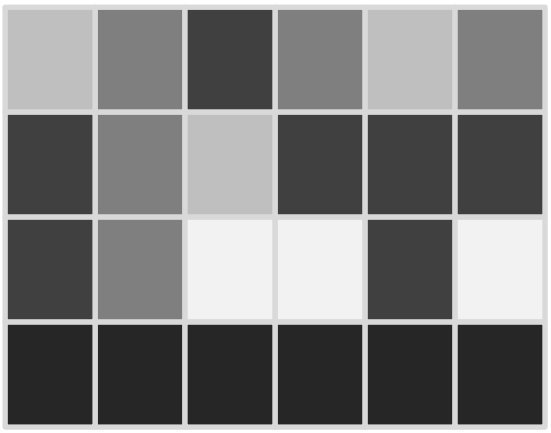


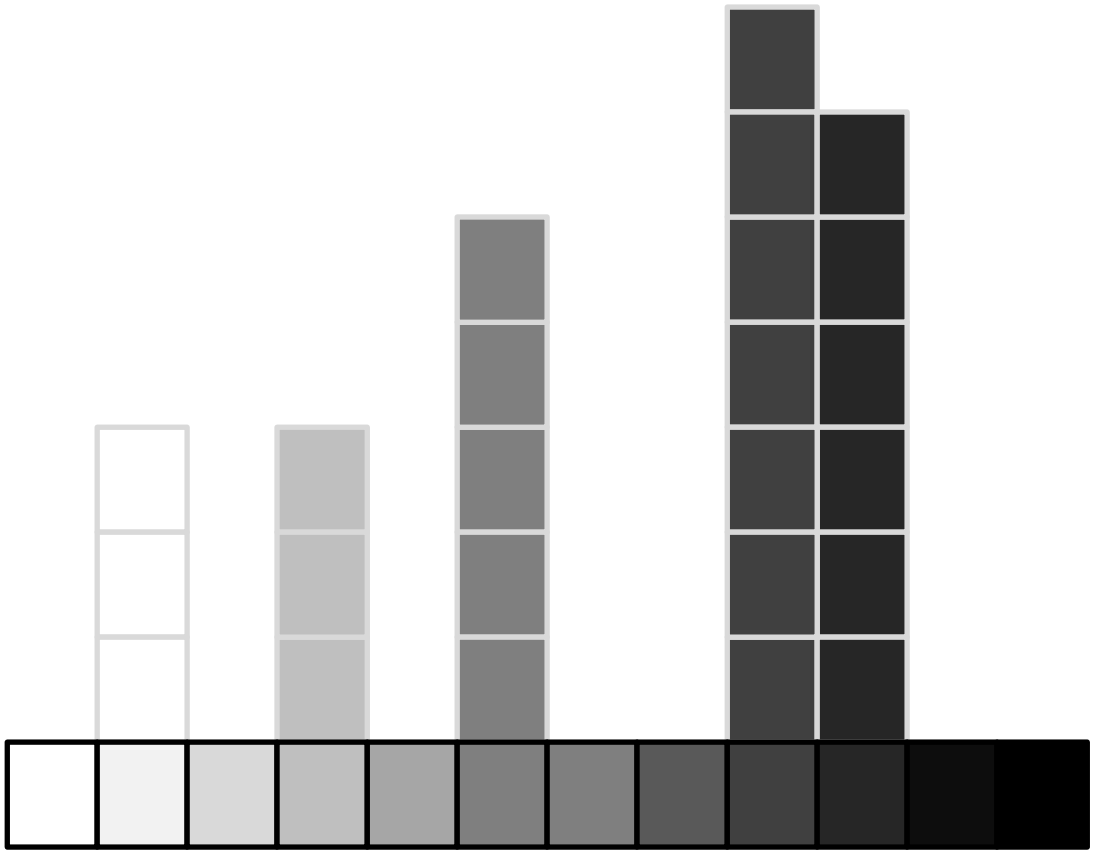












4	6	9	6	4	6
9	6	4	9	9	9
9	6	2	2	9	2
10	10	10	10	10	10

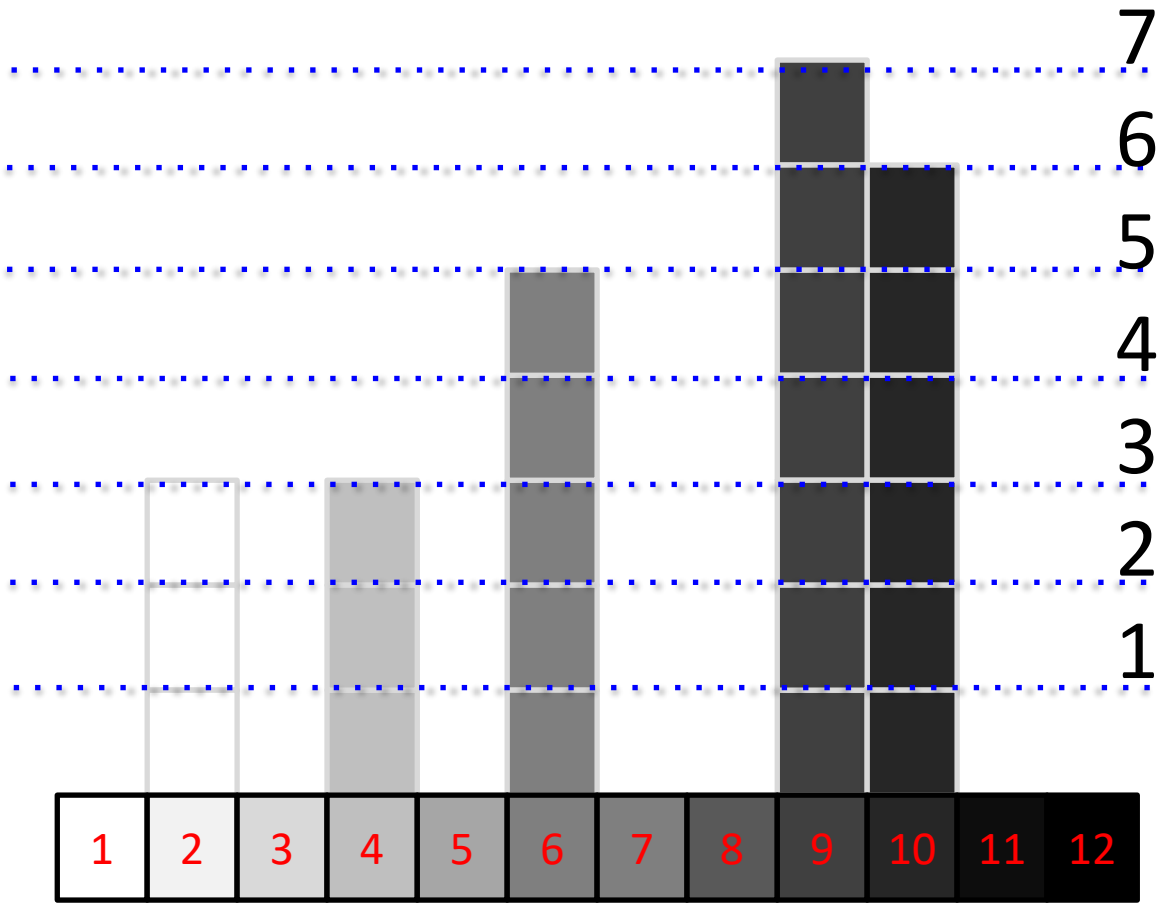


Image Histogram:

Representation that gives the number of pixels of the image for each grayvalue.

[IMAGE]

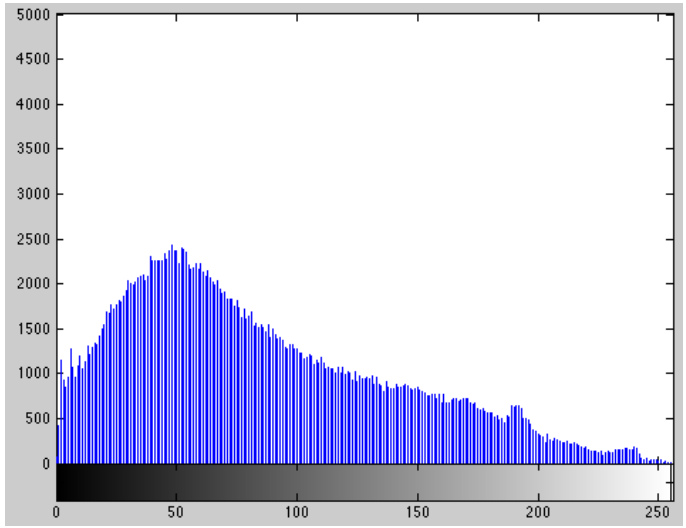


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Image Histogram:

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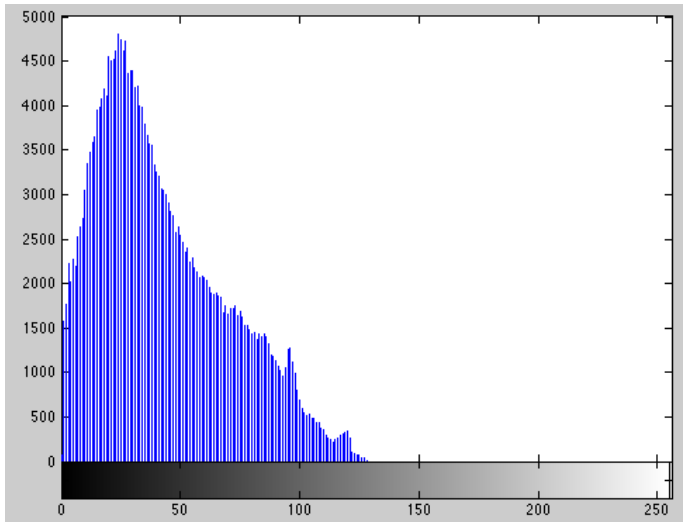
[IMAGE]

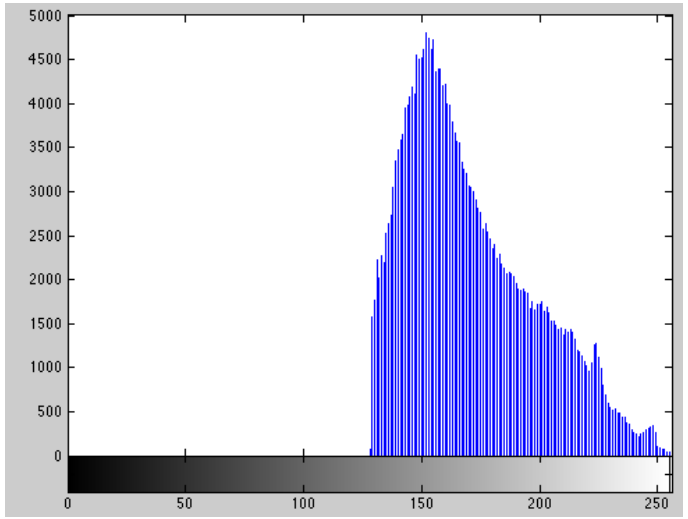


[HISTOGRAM]

Image Histogram:

Representation that gives the number of pixels of the image for each grayvalue.

[IMAGE]

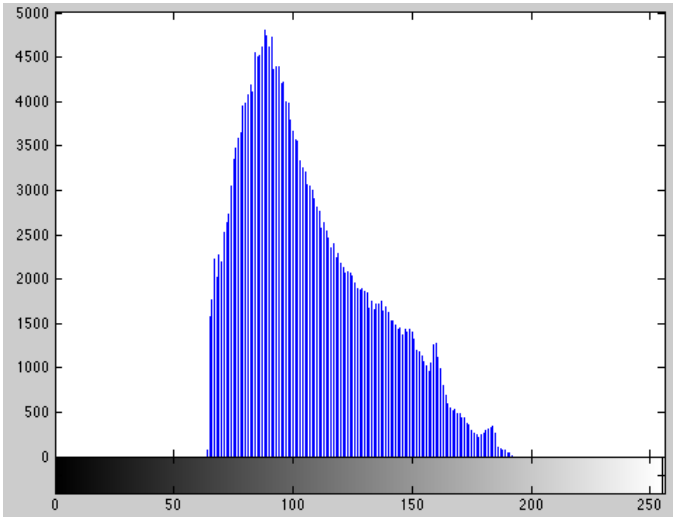


[HISTOGRAM]

Image Histogram:

Representation that gives the number of pixels of the image for each grayvalue.

[IMAGE]



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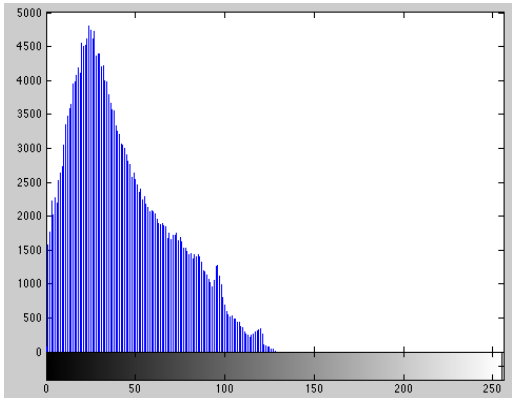
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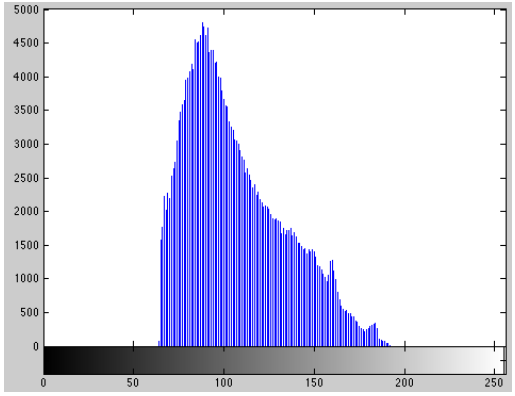
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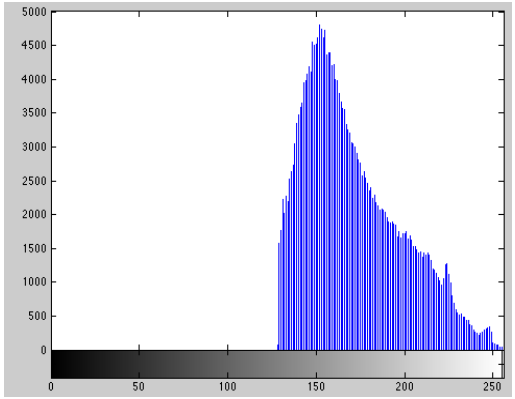
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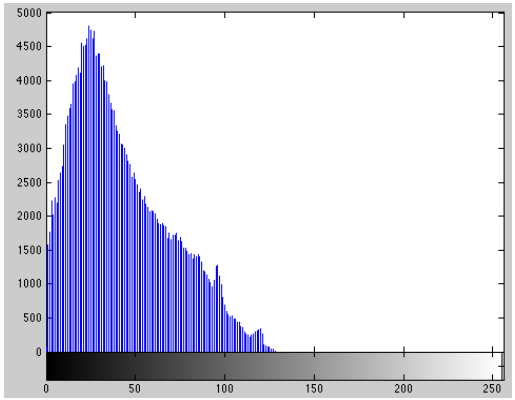
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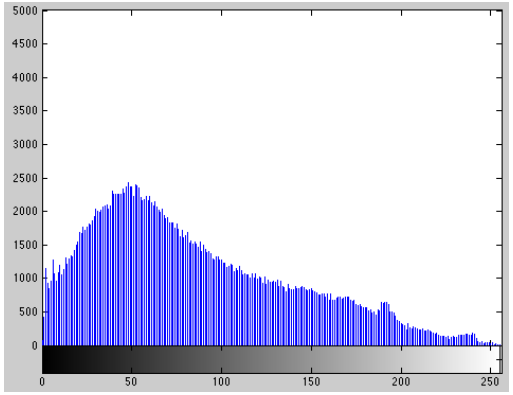
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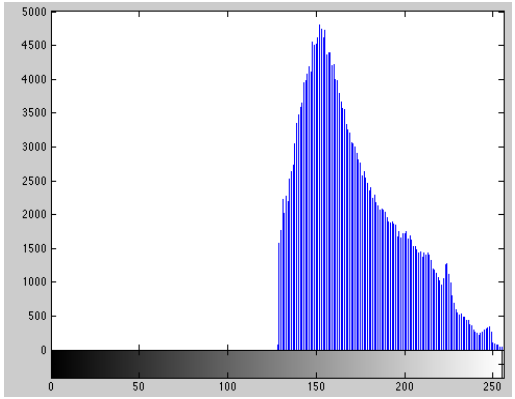
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