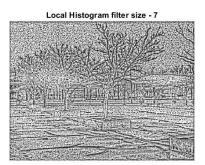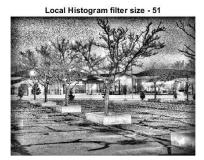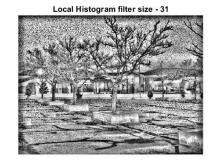Question 9

a. The local histogram produces better results than global histograms in terms of visibility of features and segmentation.
Some areas where the local histogram contrast is better include
trees behind the house and the windows of the house in the LC1 image.
The branches of trees at the back are more visible in the local histogram.
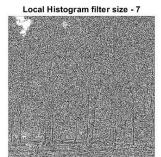
Local histogram

Local Histogram filter size - 7

Local Histogram filter size - 31

Local Histogram filter size - 51

Local Histogram filter size - 71

Global histogram

Original Image

Equalized Image

Local Histogram

Local Histogram filter size - 7

Local Histogram filter size - 31

Local Histogram filter size - 51

Local Histogram filter size - 71

Global Histogram

Original Image

Equalized Image