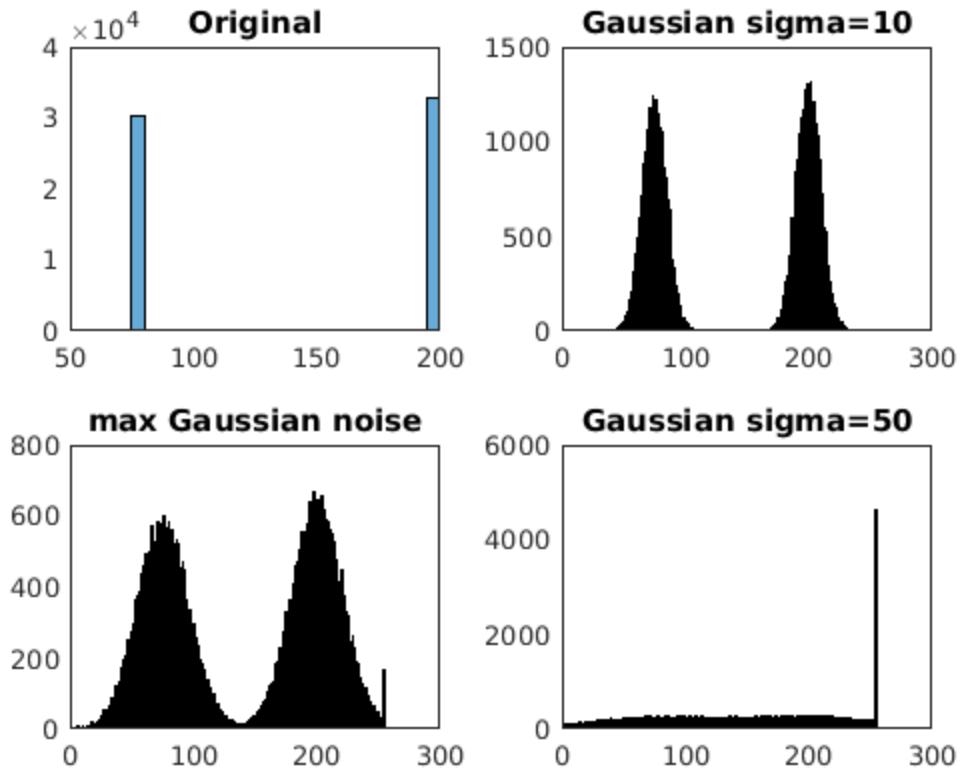
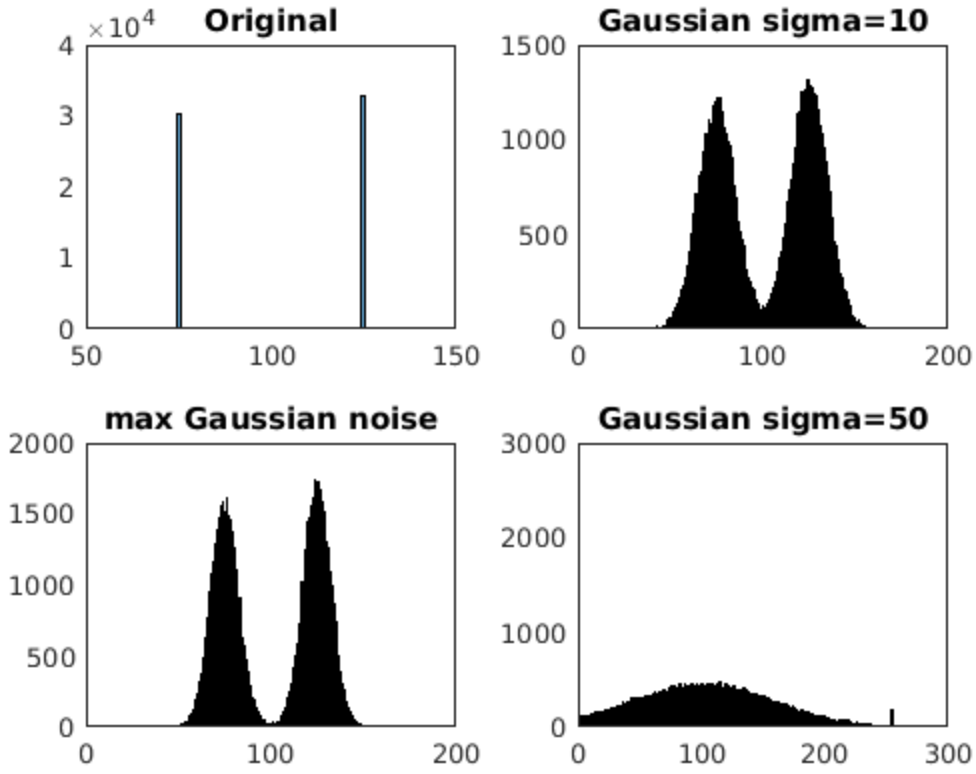
Question 3
Seperating an object by finding the global boundry

sq.mat:
a. The global boundry can be found without error
b. The global error free boundry can be found with max sigma 20.667 gaussian noise
c. The global boundry can not be found

sq1.mat:
a. The global boundry can be found without error
b. The global error free boundry can be found with max sigma 7.66679 gaussian noise
c. The global boundry can not be found

e.
The maximum sigma can be calculated with the following formula:
max_sigma = (mean2(sq) - mean(sq(sq<mean2(sq)))) / 3 - 1
we know that beyond 3 sigma border, lies 0.1% of the pixels threfore we calculate the distance between lower "model" and the mean divide by 3





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