CMSC 678 - Homework 5

Shreya Date

old means : [ 0. 5. 10.]

old variances : [7.5, 7.5, 7.5]

updated means : [ 2.42595757 1.46898767 17.93831569]

updated variances: [4.44089210e-16 2.22044605e-16 0.00000000e+00]

diff\_means: [-2.0, 4.0, -8.0]

diff\_var: [7.5, 7.5, 7.5]

Accuracy is: 0.48

old means : [ 0. 5. 10.]

old variances : [5.5, 5.5, 5.5]

updated means : [ 1.77903555 1.07725762 15.82143151]

updated variances: [0.00000000e+00 2.22044605e-16 1.77635684e-15]

diff\_means: [-2.0, 4.0, -6.0]

diff\_var: [5.5, 5.5, 5.5]

Accuracy is: 0.5533333333333333

old means : [ 0. 5. 10.]

old variances : [3.5, 3.5, 3.5]

updated means : [ 1.13211353 0.68552758 13.70454732]

updated variances: [2.22044605e-16 1.11022302e-16 1.77635684e-15]

diff\_means: [-1.0, 4.0, -4.0]

diff\_var: [3.5, 3.5, 3.5]

Accuracy is: 0.66

old means : [ 0. 5. 10.]

old variances : [1.5, 1.5, 1.5]

updated means : [ 0.48519151 0.29379753 11.58766314]

updated variances: [0. 0. 0.]

diff\_means: [0.0, 5.0, -2.0]

diff\_var: [1.5, 1.5, 1.5]

Accuracy is: 0.9

old means : [ 0. 5. 10.]

old variances : [0.5, 0.5, 0.5]

updated means : [ 0.1617305 0.09793251 10.52922105]

updated variances: [2.77555756e-17 1.38777878e-17 0.00000000e+00]

diff\_means: [0.0, 5.0, -1.0]

diff\_var: [0.5, 0.5, 0.5]

Accuracy is: 1.0