HW2   Kelly Jones

Run	Error Rates		
	Width = 0.01	Width = 0.5	Width = 10
1	0	0.03922	0.66667
2	0	0.05882	0.66667
3	0	0.05882	0.66667
4	0	0.05882	0.66667
5	0	0.05882	0.66667
6	0	0.01961	0.66667
7	0	0.07843	0.66667
8	0	0.05882	0.66667
9	0	0.05882	0.64706
10	0	0.01961	0.66667
11	0	0.01961	0.66667
12	0	0.09804	0.66667
13	0	0.03922	0.66667
14	0	0.03922	0.66667
15	0	0.01961	0.66667
Average Error	0	0.04837	0.66536
Varience of Error	0	0.00054	0.00003

For this classification, it is very apparent that window width plays a large role. The classifier using the smallest window width of 0.01 was error free while a window size of 10 was wrong around 66.5% of the time. Since all classes had variences less than one, it would make sense that a large window would provide little accuracy.

A window width of 0.5 gives a better insight into the nature of the classification. While 200 times smaller than the largest window, its average error was around 4.8%. This error rate could be acceptable for applications where generalization for larger or somewhat dissimilar data need to be classified. Of course, if that error is acceptable is dependent on the problem.