Perceptron:
perceptron with n = 500
0.9931
perceptron with n = 1000
0.9664
bestresult: correct_500 = 0.9931 correct_1000 = 0.9664

Perceptron with margin:
perceptron(margin) with n = 500, r = 1.5
0.9931
perceptron(margin) with n = 1000, r = 1.5
0.9664
perceptron(margin) with n = 500, r = 0.25
0.9953
perceptron(margin) with n = 1000, r = 0.25
0.9822
perceptron(margin) with n = 500, r = 0.03
0.9975
perceptron(margin) with n = 1000, r = 0.03
0.9839
perceptron(margin) with n = 500, r = 0.005
0.9994
perceptron(margin) with n = 1000, r = 0.005
0.9844
perceptron(margin) with n = 500, r = 0.001
0.9958
perceptron(margin) with n = 1000, r = 0.001
0.9953
bestresult: correct_500 = 0.9958 correct_1000 = 0.9953 learning rate = 0.001

Winnow:
winnow with n = 500, alpha = 1.1
0.999
winnow with n = 1000, alpha = 1.1
0.9994
winnow with n = 500, alpha = 1.01
0.977
winnow with n = 1000, alpha = 1.01
0.937
winnow with n = 500, alpha = 1.005
0.5858
winnow with n = 1000, alpha = 1.005
0.5588
winnow with n = 500, alpha = 1.0005

0.4955
winnow with n = 1000, alpha = 1.0005
0.4962
winnow with n = 500, alpha = 1.0001
0.5032
winnow with n = 1000, alpha = 1.0001
0.4919
bestresult: correct_500 = 0.999 correct_1000 = 0.9994 alpha = 1.1

Winnow with margin:
winnow(margin) with n = 500, alpha = 1.1 gamma = 2.0
0.9992
winnow(margin) with n = 1000, alpha = 1.1 gamma = 2.0
0.9995
winnow(margin) with n = 500, alpha = 1.1 gamma = 0.3
0.999
winnow(margin) with n = 1000, alpha = 1.1 gamma = 0.3
0.9994
winnow(margin) with n = 500, alpha = 1.1 gamma = 0.04
0.999
winnow(margin) with n = 1000, alpha = 1.1 gamma = 0.04
0.9994
winnow(margin) with n = 500, alpha = 1.1 gamma = 0.006
0.999
winnow(margin) with n = 1000, alpha = 1.1 gamma = 0.006
0.9994
winnow(margin) with n = 500, alpha = 1.1 gamma = 0.001
0.999
winnow(margin) with n = 1000, alpha = 1.1 gamma = 0.001
0.9994
winnow(margin) with n = 500, alpha = 1.01 gamma = 2.0
0.9778
winnow(margin) with n = 1000, alpha = 1.01 gamma = 2.0
0.939
winnow(margin) with n = 500, alpha = 1.01 gamma = 0.3
0.9773
winnow(margin) with n = 1000, alpha = 1.01 gamma = 0.3
0.9373
winnow(margin) with n = 500, alpha = 1.01 gamma = 0.04
0.977
winnow(margin) with n = 1000, alpha = 1.01 gamma = 0.04
0.937
winnow(margin) with n = 500, alpha = 1.01 gamma = 0.006
0.977

winnow(margin) with n = 1000, alpha = 1.01 gamma = 0.006
0.937
winnow(margin) with n = 500, alpha = 1.01 gamma = 0.001
0.977
winnow(margin) with n = 1000, alpha = 1.01 gamma = 0.001
0.937
winnow(margin) with n = 500, alpha = 1.005 gamma = 2.0
0.5863
winnow(margin) with n = 1000, alpha = 1.005 gamma = 2.0
0.5562
winnow(margin) with n = 500, alpha = 1.005 gamma = 0.3
0.5869
winnow(margin) with n = 1000, alpha = 1.005 gamma = 0.3
0.5563
winnow(margin) with n = 500, alpha = 1.005 gamma = 0.04
0.5858
winnow(margin) with n = 1000, alpha = 1.005 gamma = 0.04
0.5588
winnow(margin) with n = 500, alpha = 1.005 gamma = 0.006
0.5858
winnow(margin) with n = 1000, alpha = 1.005 gamma = 0.006
0.5588
winnow(margin) with n = 500, alpha = 1.005 gamma = 0.001
0.5858
winnow(margin) with n = 1000, alpha = 1.005 gamma = 0.001
0.5588
winnow(margin) with n = 500, alpha = 1.0005 gamma = 2.0
0.4954
winnow(margin) with n = 1000, alpha = 1.0005 gamma = 2.0
0.4965
winnow(margin) with n = 500, alpha = 1.0005 gamma = 0.3
0.4955
winnow(margin) with n = 1000, alpha = 1.0005 gamma = 0.3
0.4964
winnow(margin) with n = 500, alpha = 1.0005 gamma = 0.04
0.4955
winnow(margin) with n = 1000, alpha = 1.0005 gamma = 0.04
0.4962
winnow(margin) with n = 500, alpha = 1.0005 gamma = 0.006
0.4955
winnow(margin) with n = 1000, alpha = 1.0005 gamma = 0.006
0.4962
winnow(margin) with n = 500, alpha = 1.0005 gamma = 0.001
0.4955

winnow(margin) with n = 1000, alpha = 1.0005 gamma = 0.001
0.4962
winnow(margin) with n = 500, alpha = 1.0001 gamma = 2.0
0.5032
winnow(margin) with n = 1000, alpha = 1.0001 gamma = 2.0
0.4919
winnow(margin) with n = 500, alpha = 1.0001 gamma = 0.3
0.5032
winnow(margin) with n = 1000, alpha = 1.0001 gamma = 0.3
0.4919
winnow(margin) with n = 500, alpha = 1.0001 gamma = 0.04
0.5032
winnow(margin) with n = 1000, alpha = 1.0001 gamma = 0.04
0.4919
winnow(margin) with n = 500, alpha = 1.0001 gamma = 0.006
0.5032
winnow(margin) with n = 1000, alpha = 1.0001 gamma = 0.006
0.4919
winnow(margin) with n = 500, alpha = 1.0001 gamma = 0.001
0.5032
winnow(margin) with n = 1000, alpha = 1.0001 gamma = 0.001
0.4919
bestresult: correct_500 = 0.9992 correct_1000 = 0.9995 alpha = 1.1 gamma = 2.0

Adagrad:
adagrad with n = 500, alpha = 1.5
0.9827
adagrad with n = 1000, alpha = 1.5
0.9946
adagrad with n = 500, alpha = 0.25
0.9906
adagrad with n = 1000, alpha = 0.25
0.9947
adagrad with n = 500, alpha = 0.03
0.9581
adagrad with n = 1000, alpha = 0.03
0.9428
adagrad with n = 500, alpha = 0.005
0.6657
adagrad with n = 1000, alpha = 0.005
0.6202
adagrad with n = 500, alpha = 0.001
0.4977
adagrad with n = 1000, alpha = 0.001

0.5
bestresult: correct_500 = 0.9906 correct_1000 = 0.9947 learning rate = 0.25