

STATS 202A: Assignment #8

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Training Accuracies

Here we plot the training accuracies of different settings.

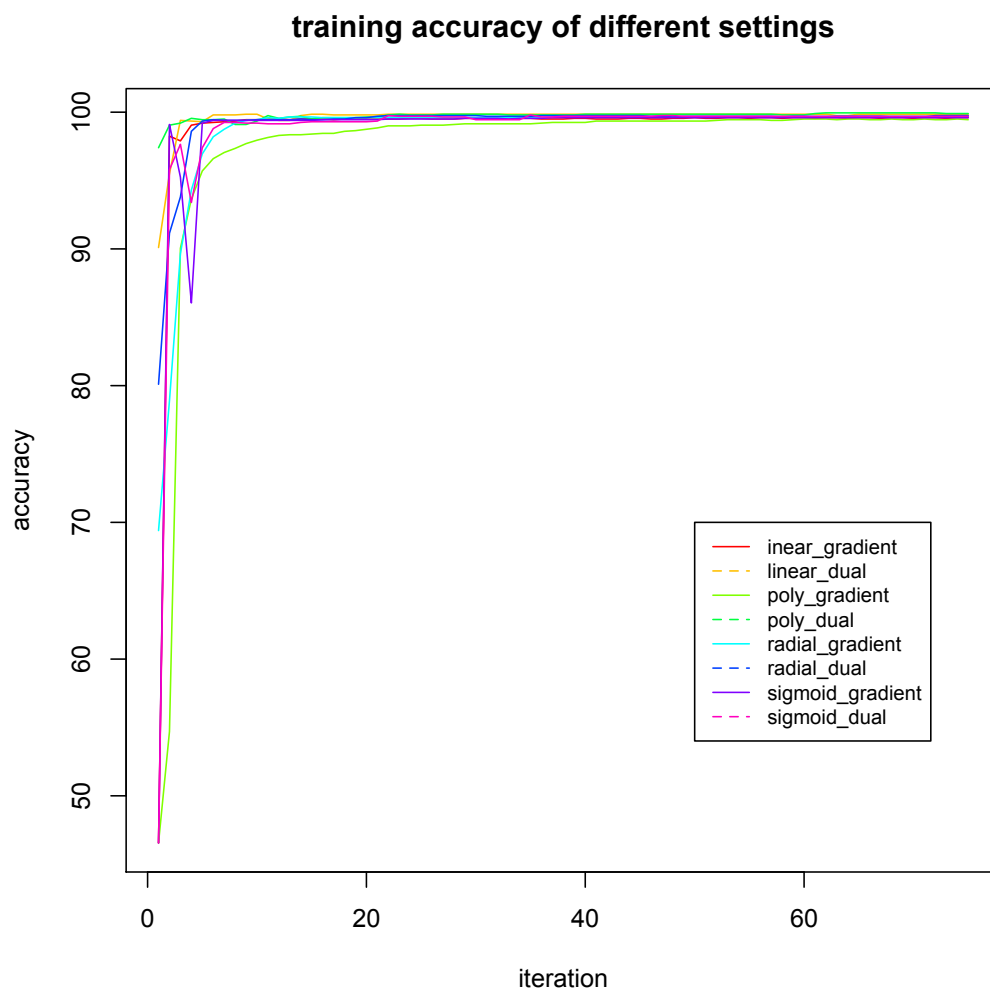


Figure 1: Training accuracy of all eight settings

Testing Accuracies

We print the testing accuracies of each setting, which are listed as follows.

```
Final traning accuracy: 99.6 %
Final testing accuracy: 100 %[1] "test_acc_linear_gradient 100"
Final traning accuracy: 99.85 %
Final testing accuracy: 100 %[1] "test_acc_linear_dual 100"
Final traning accuracy: 99.45 %
Final testing accuracy: 99.8 %[1] "test_acc_poly_gradient 99.8"
Final traning accuracy: 99.9 %
Final testing accuracy: 100 %[1] "test_acc_poly_dual 100"
Final traning accuracy: 99.7 %
Final testing accuracy: 100 %[1] "test_acc_radial_gradient 100"
Final traning accuracy: 99.75 %
Final testing accuracy: 100 %[1] "test_acc_radial_dual 100"
Final traning accuracy: 99.6 %
Final testing accuracy: 100 %[1] "test_acc_sigmoid_gradient 100"
Final traning accuracy: 99.7 %
Final testing accuracy: 99.8 %[1] "test_acc_sigmoid_dual 99.8"
```

Additional Graphs

We also plot some additional sub-graphs of different settings.

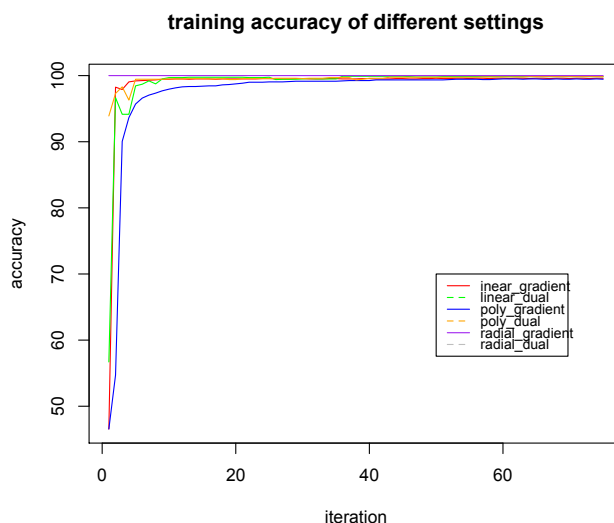


Figure 2: Training accuracy of linear gradient, linear dual, polinomial gradient, polinomial dual (radial basis has bad parameters in this graph, so we tune the parameters and plot other graphs).

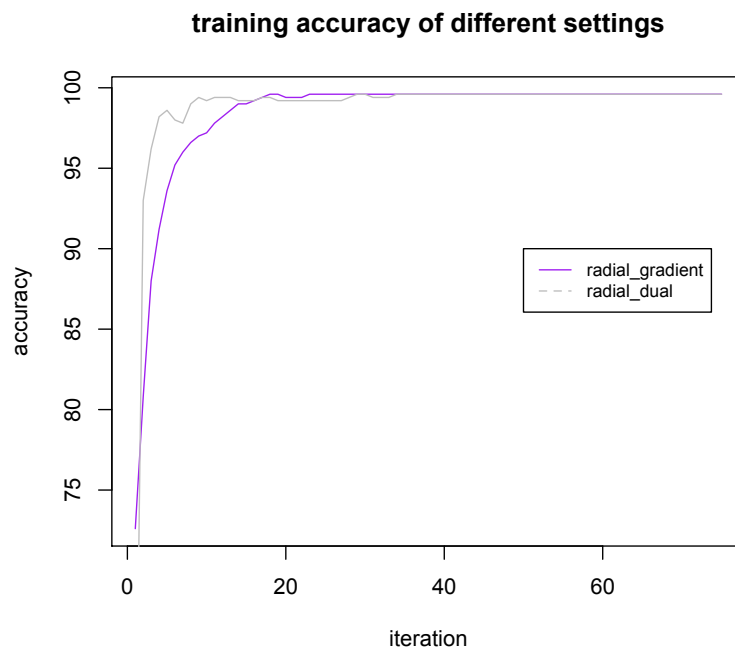


Figure 3: Training accuracy of radial basis gradient, radial basis dual

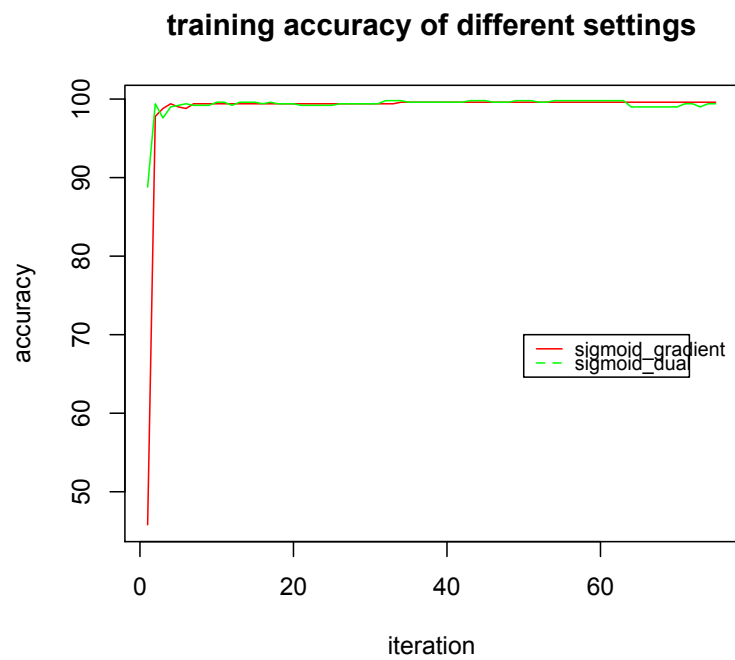


Figure 4: Training accuracy of sigmoid gradient, sigmoid dual