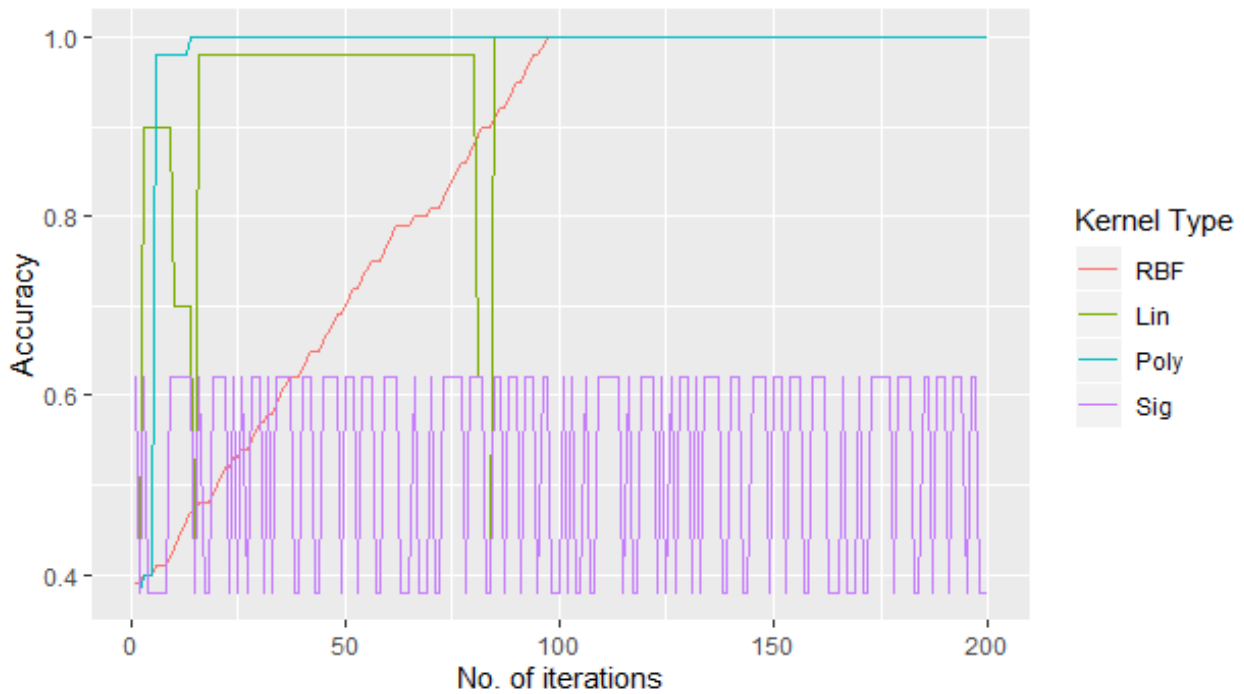


## STATS 202A – HW 8 REPORT

The below image captures the accuracy per each iteration for the 4 different kernels: RBF, Linear, Polynomial, Sigmoid through the Gradient Descent algorithm.



Accuracy result:

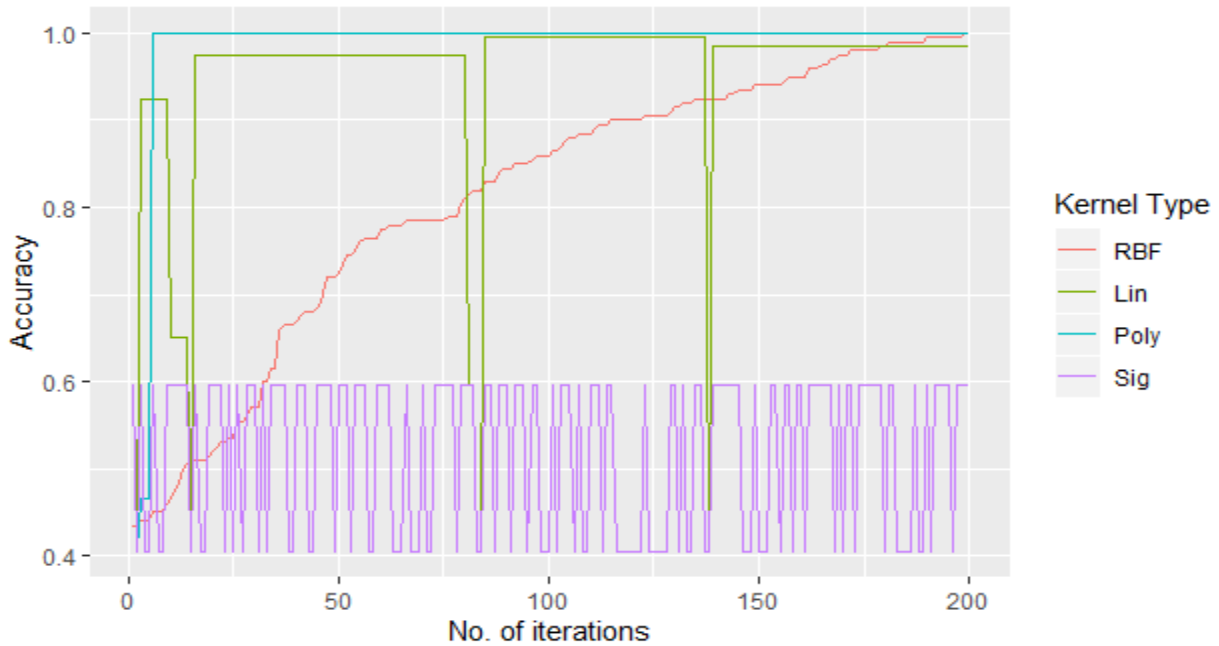
RBF: 96.5%

Linear: 92.1%

Polynomial: 98.5%

Sigmoid: 62.1%

The below image captures the accuracy per each iteration for the 4 different kernels: RBF, Linear, Polynomial, Sigmoid through the Dual Coordinate Ascent algorithm.



Accuracy result:

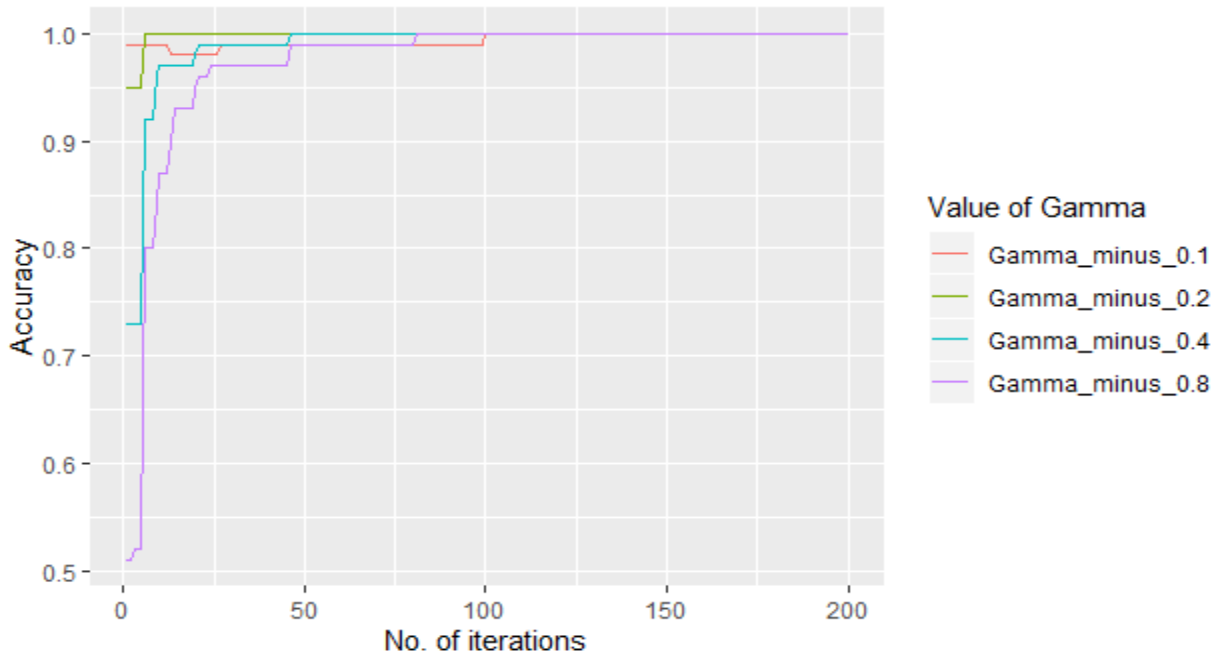
RBF: 94.3%

Linear: 90.2%

Polynomial: 96.5%

Sigmoid: 58.1%

The below image captures the accuracy per each iteration for different settings of the RBF kernel:  
a) Gamma = -0.1 b) Gamma = -0.2 c) Gamma = -0.4 d) Gamma = -0.8.



Accuracy result:

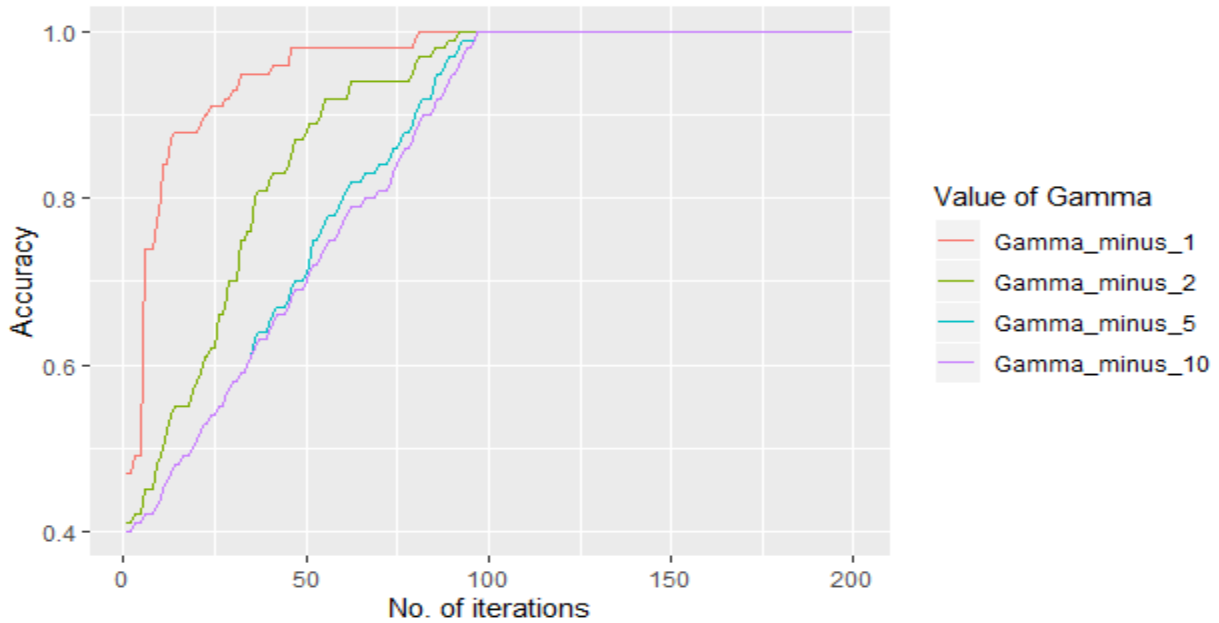
Gamma = -0.1 : 97.1%

Gamma = -0.2 : 97.6%

Gamma = -0.4 : 98.4%

Gamma = -0.8 : 98.5%

The below image captures the accuracy per each iteration for different settings of the RBF kernel:  
a) Gamma = -1 b) Gamma = -2 c) Gamma = -5 d) Gamma = -10



Accuracy result:

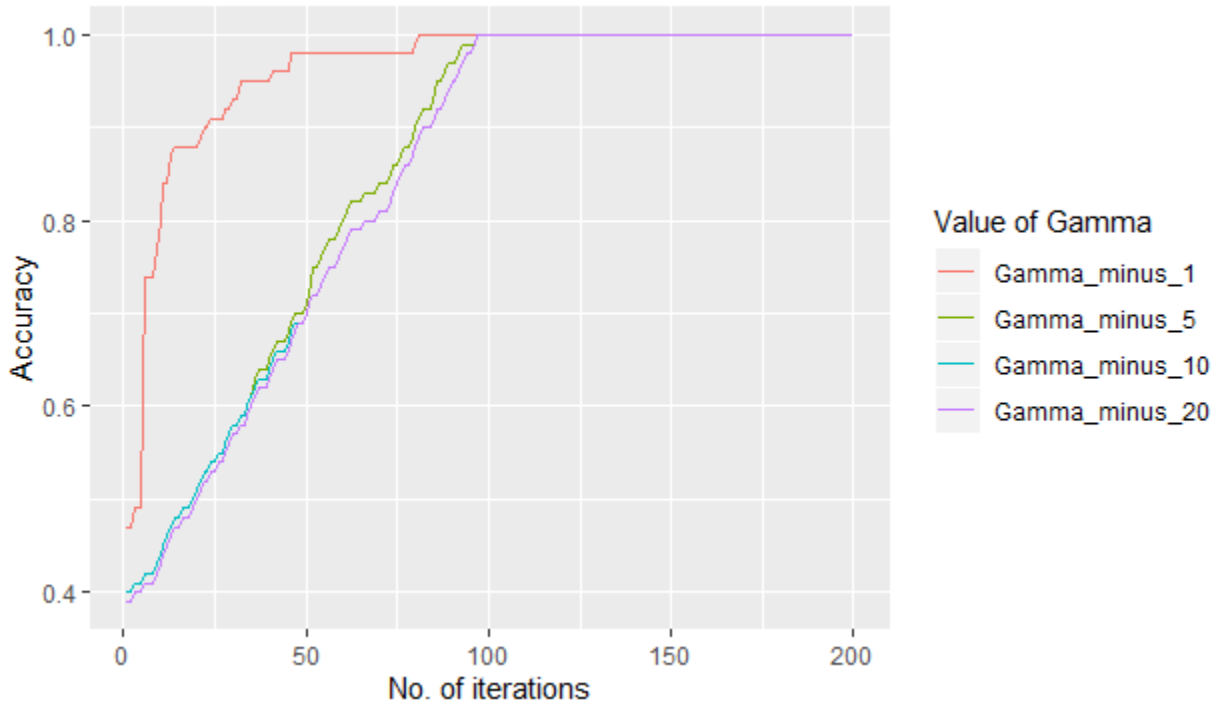
Gamma = -1 : 96.5%

Gamma = -2 : 96.1%

Gamma = -5 : 96.6%

Gamma = -10 : 95.9%

The below image captures the accuracy per each iteration for different settings of the RBF kernel:  
kernel:     a) Gamma = -1 b) Gamma = -5 c) Gamma = -10 d) Gamma = -20



Accuracy result:

Gamma = -1 : 97.1%

Gamma = -5 : 95.9%

Gamma = -10 : 96.1%

Gamma = -20 : 95.8%