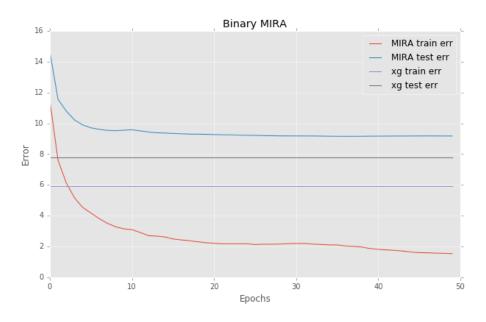
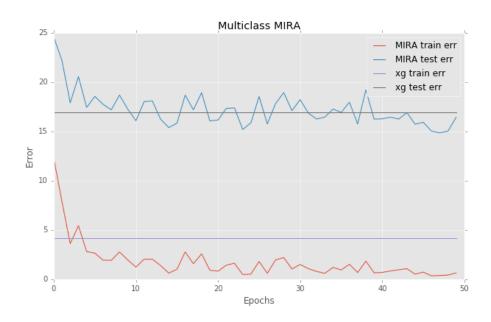
## Problem 1

Based on the plots below we can conclude that MIRA algorithm works better for the Multiclass classification than XG boost algorithm, but in the case of binary classification it is overfitting the training data.





## Problem 2

We can see from the plot below that as we go on increasing the number of landmark points in LLSVM its performance is becoming more and more closer to that of kernel SVM. XG boost performance is much better than both LLSVM and Kernel SVM.

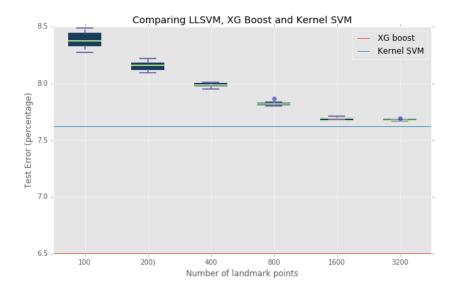


Figure 1: For IJCNN1 Dataset

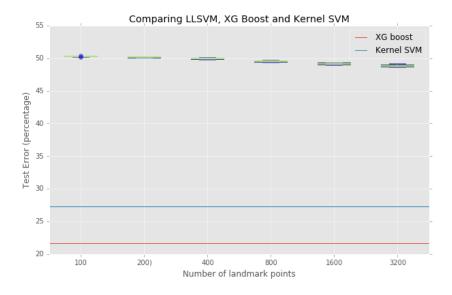


Figure 2: For covType Dataset