## **Questions 1-7**

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- 1. a) Baseline training accuracy: 0.5721
  - b) Baseline test accuracy: 0.592
- 2. a) We used the **nnet** package in R
  - b) Neural net training accuracy: 0.573
  - c) Neural net test accuracy: 0.5905
  - d) Normalized neural net: Train: 0.5731, Test: 0.591
- 3. a) We used the e1071 package in R
  - b) Linear SVM training: 0.5721
  - c) Linear SVM test: 0.592
  - d) RBF SVM training: 0.573
  - e) RBF SVM test: 0.593
  - f) RBF log-transformed SVM test: 0.5924
  - g) RBF z-transformed SVM test: 0.5924
- 4. a) Neural net test: 0.634
  - b) RBF SVM test: 0.6475
- 5. A original was best
- 6. C z-score was best
- 7. a) Neural net test: 0.5726
  - b) RBF SVM test: 0.6482