File 3

- 1. Collinearity
- 2. Random Forest
- 3. Decision Tree are prone to overfit
- 4. Training data
- 5. Anomaly detection
- 6. c) Case based (it's not a numerical function, but rather a machine learning approach)
- 7. Both a and b
- 8. Both a and b
- 9. 1 (radial basis function neural networks typically have a single hidden layer)
- 10. KMeans (it's an unsupervised clustering algorithm)
- 11. Neither feature nor number of groups is known

- 12. SVG (there is no algorithm called "SVG" in machine learning)
- 13. Overfitting
- 14. Reinforcement learning
- 15. Mean squared error
- 16. Linear, binary
- 17. supervised learning
- 18. both a and b.
- 19. removing columns which have high variance in data.
- 20. input attribute.
- 21. SVM allows very low error in classification
- *22.* Only 2.
- 23. $-(6/10 \log(6/10) + 4/10 \log(4/10))$.
- 24. weights are regularized with the l1 norm.
- 25. Perceptron

- 26. Either 1 or 3
- 27. increase by 5 pounds
- 28. Minimize the squared distance from the points
- 29. As the value of one attribute increases the value of the second attribute also increases
- 30. Convolutional Neural Network