1. Recognize the differences between supervised, semi-supervised, and unsupervised learning.

2. Describe in detail any five examples of classification problems.

3. Describe each phase of the classification process in detail.

4. Go through the SVM model in depth using various scenarios.

5. What are some of the benefits and drawbacks of SVM?

6. Go over the kNN model in depth.

7. Discuss the kNN algorithm's error rate and validation error.

8. For kNN, talk about how to measure the difference between the test and training results.

9. Create the kNN algorithm.

What is a decision tree, exactly? What are the various kinds of nodes? Explain all in depth.

11. Describe the different ways to scan a decision tree.

12. Describe in depth the decision tree algorithm.

13. In a decision tree, what is inductive bias? What would you do to stop overfitting?

14.Explain advantages and disadvantages of using a decision tree?

15. Describe in depth the problems that are suitable for decision tree learning.

16. Describe in depth the random forest model. What distinguishes a random forest?

17. In a random forest, talk about OOB error and variable value.