MACHINE LEARNING

1. Which of the following are disadvantages of using Hard Margin SVM classifier?

Answer→C) They are not optimal to use in case of outliers.

2. Which of the following statements are true regarding maximal margin classifier?

Answer→A) It is the most optimal classifier in a completely linearly separable data.

B) It's the classifier for which the margin length or the distance between the closest data-point on either side of the classifier and the classifier is maximized.

3. Which of the following statements are true regarding soft margin SVM classifier?

Answer→A) They are less sensitive to outliers and can be used even in their presence.

C) They allow some degree of errors or misclassification.

D) They can be used in case data is not completely linearly separable.

4. Which of the following statements are true regarding SVMs?

Answer→ A) They take the data from lower dimensional space to some higher dimensional space in case the data is not likely to be linearly separable.

B) They use the kernel tricks to escape the complex computations required to transform the data.

5. Which of the following Statements are true regarding the Kernel functions used in SVM?

Answer→A) These functions give value of the dot product of pairs of data-points in the desired higher. dimensional space without even explicitly converting the whole data into higher dimensional space.

C) The data product values given by the kernel functions are used to find the classifier in the higher dimensional space.

6. How can SVM be classified?

Answer→ D) It is a model trained using supervised learning. It can be used for classification not for regression.

7. The quality of an SVM model depends upon:

Answer→ D) All of the above

8. The SVM's are less effective when:

Answer→ C) The data is noisy and contains overlapping points.

9. What would happen when you use very small C (C~0)?

Answer→ A) Misclassification would happen.

10. What do you mean by generalization error in terms of the SVM?

Answer→ B) How accurately the SVM can predict outcomes for unseen data.