**[Que-50.23] - Explain the difference between a hard margin and a soft margin SVM,**

### **Hard Margin vs. Soft Margin SVM**

**Hard Margin SVM:**

* Assumes data is perfectly linearly separable.
* No tolerance for misclassifications.

**Soft Margin SVM:**

* Allows some misclassifications to balance between margin maximization and classification error.
* Introduces a regularization parameter (C) to control the trade-off.