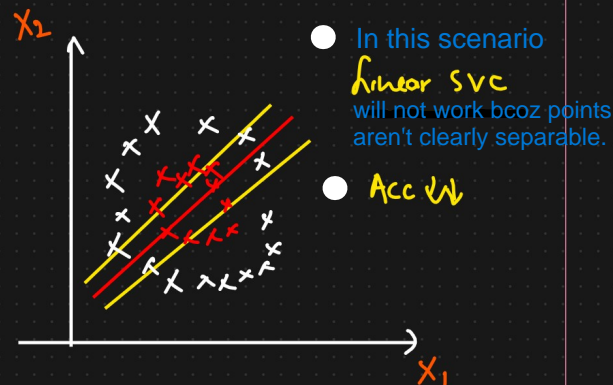
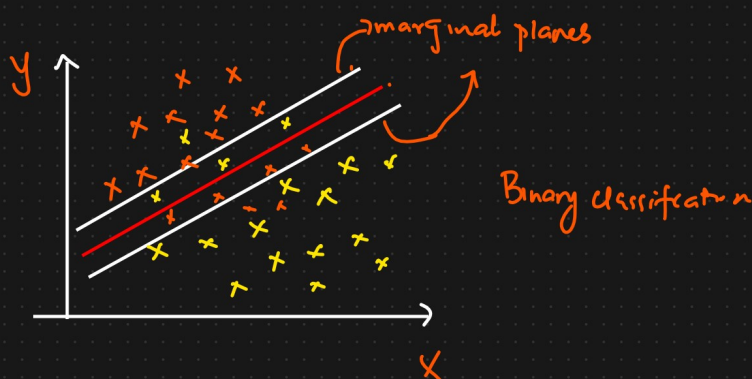


SVM KERNELS

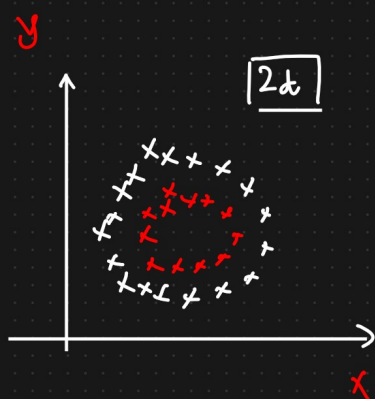


Linear SVC



SVM kernels are functions that transform data into a higher-dimensional space to make it easier to classify using a hyperplane then apply Linear SVC.

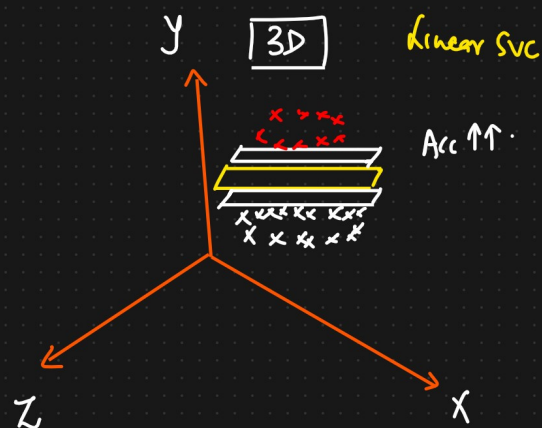
SVM Kernels



⇒ Transformations ⇒



Mathematical formulas



Dataset : 1d

SVM Kernel

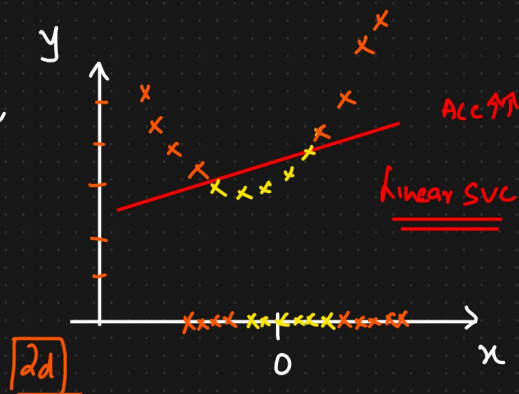
Linear SVC

Here, I can only create 1 separation line but data is separable at 2 points.



Transformation

$$y = x^2$$



① Polynomial Kernel

② RBF Kernel

③ Sigmoid Kernel