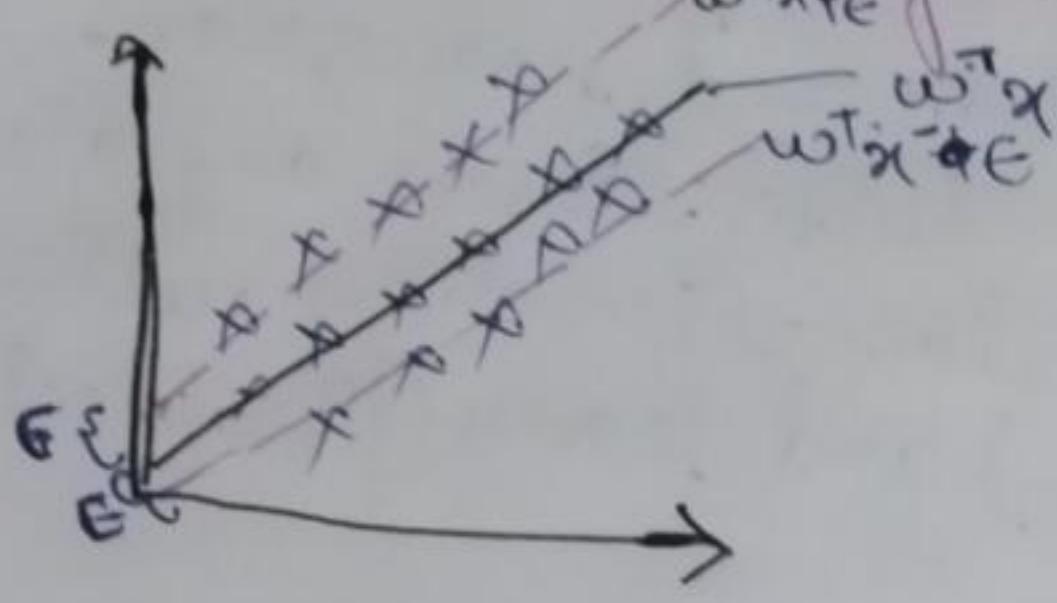
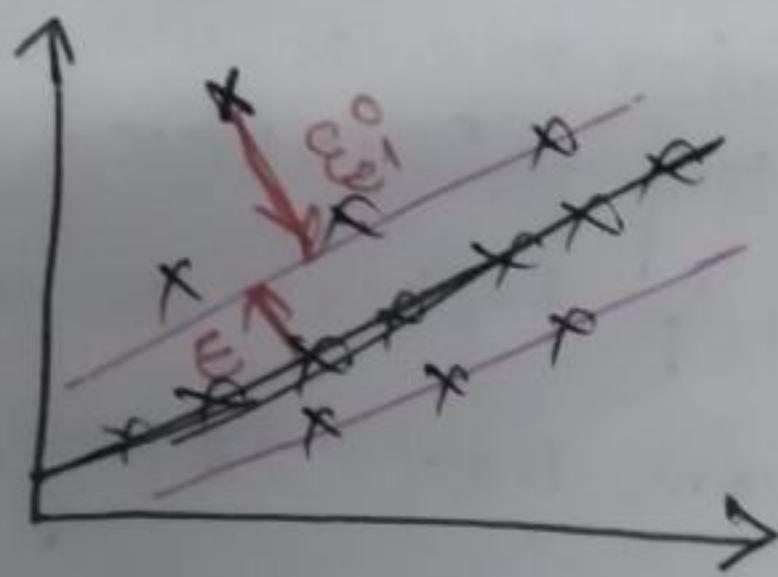


Support Vector Regression



Cost function - Margin plane ke data points
Minimize (w, b) $\frac{\|w\|}{2}$

Constraint -
 $|y_i - w^T x_i - b| \leq \epsilon$ \rightarrow It's very good.

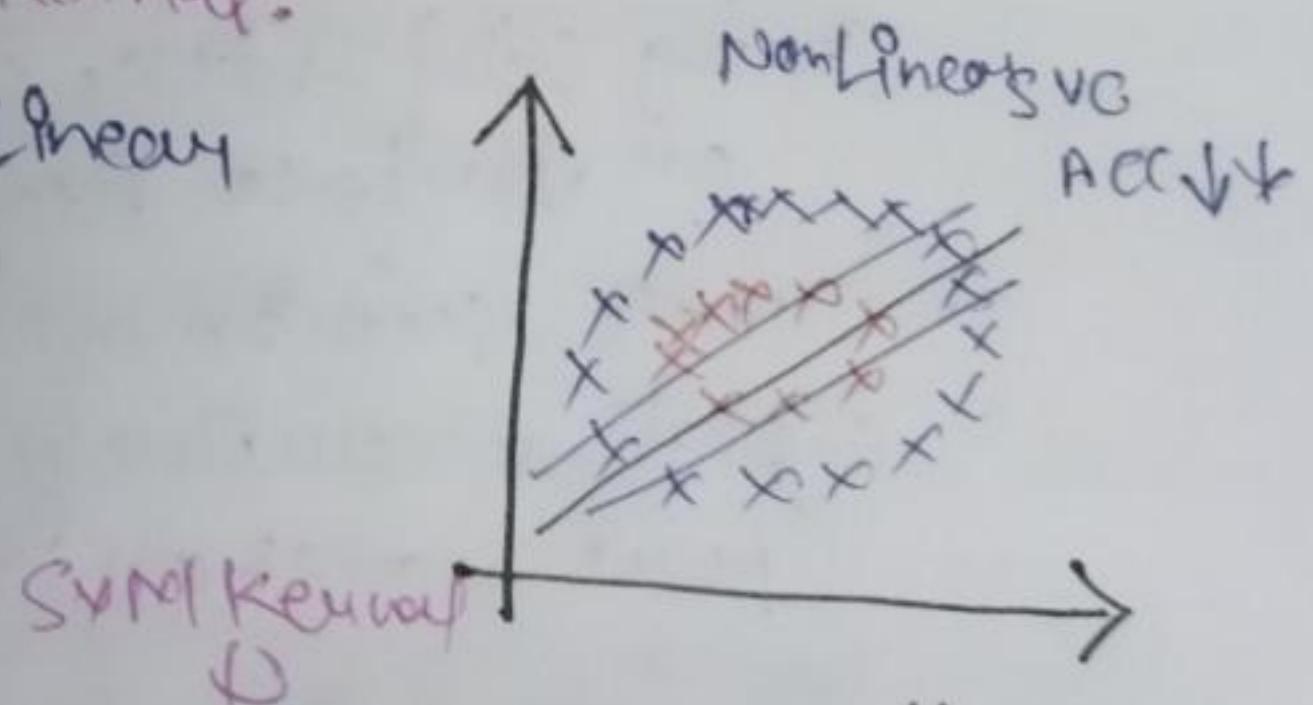
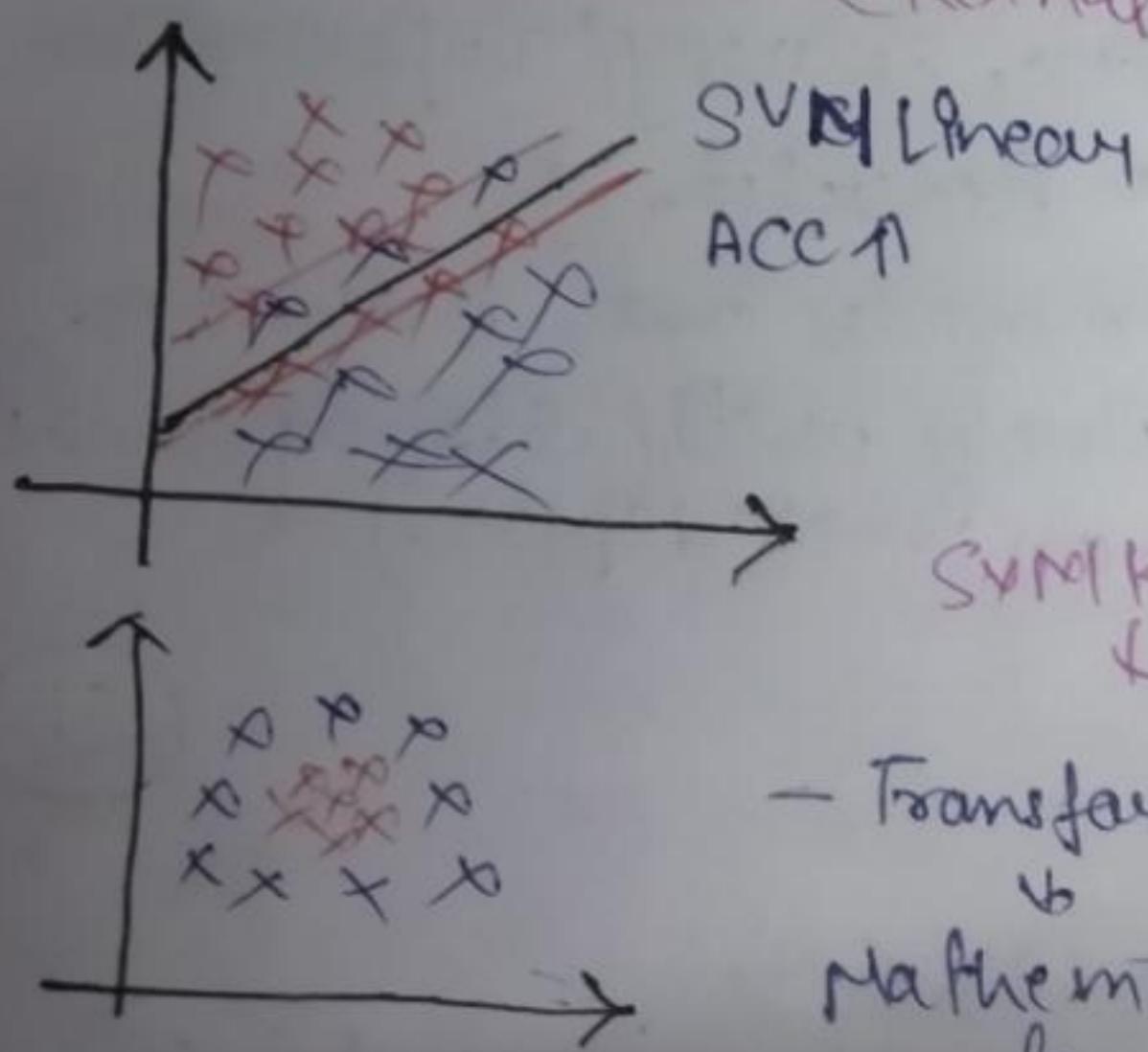


Cost fun. (Margin plane ke baki wale data Point)

Minimize $\frac{\|w\|}{2} + C \sum_{i=1}^n |\xi_i|$

Constraint
 $|y_i - w^T x_i - b| \leq \epsilon + \xi_i$ Hinge loss Hyper plane meter

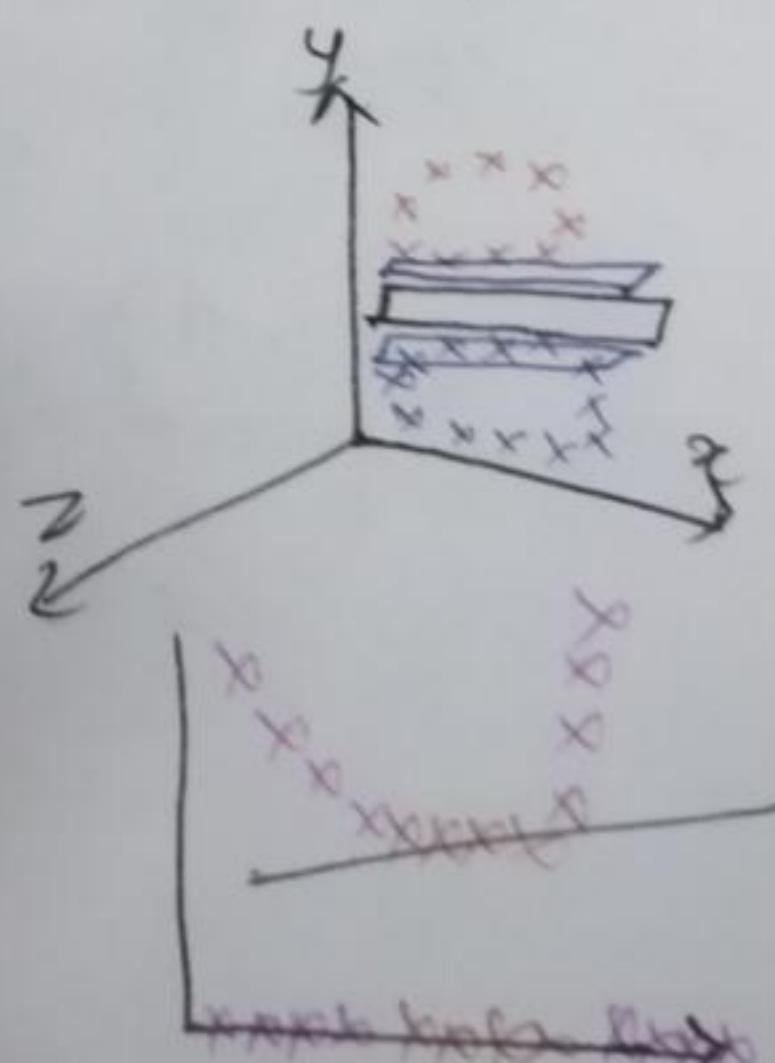
Support vector Machine Kernel.



SVM Kernel
- Transformation
Mathematical formula.

Transformation

$$y = 10x^2$$



Eg -

Linear SVC / P

