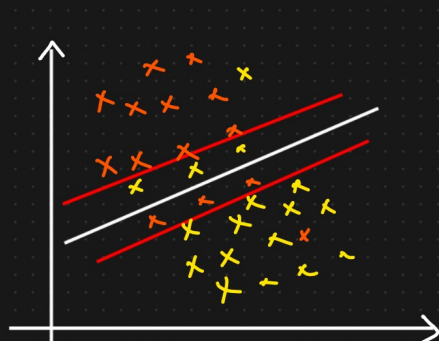
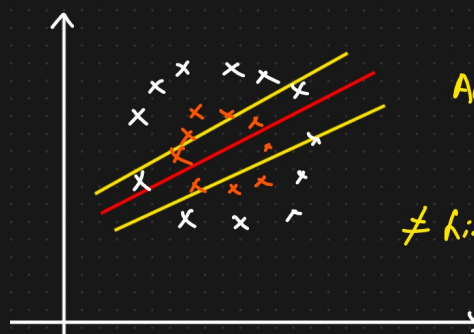


SVM Kernels



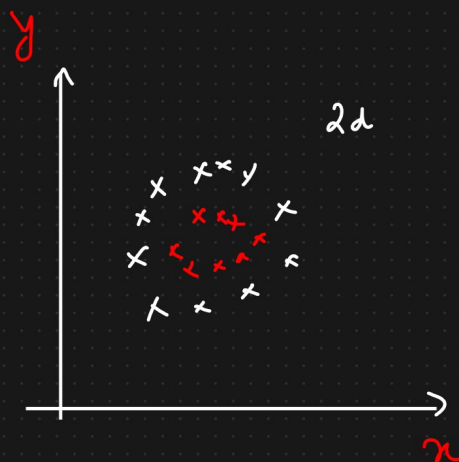
linear SVC



Accuracy = 50%

≠ linear SVC

⇓
SVM Kernels



2d

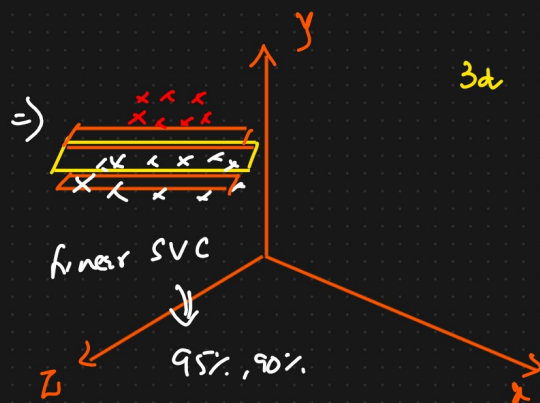
⇒ TRANSFORMATION

⇓

Mathematical Formula

$$Z = f(x, y)$$

↳ Mathematical formula.



3d

linear SVC

95%, 90%

Dataset

X	Y	$Z = x^2$
2	Yes	4
3	No	9
4	Yes	16
-	Yes	-
-	-	-

1 dimension
==



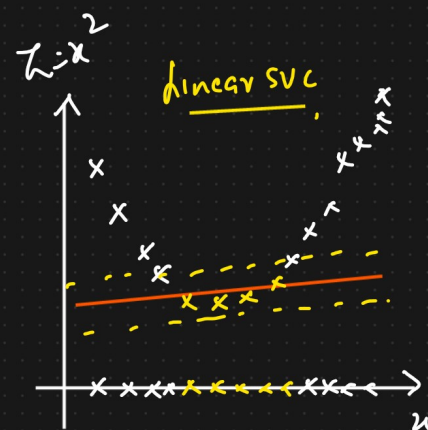
1d - 2d

SVM Kernel

⇓

Data Transformation

$$Z = x^2$$



$Z = x^2$

linear SVC

① Polynomial Kernel

② RBF Kernel

③ Sigmoid Kernel

⇒ Transformation ⇒ Mathematical formula