**TYPES OF KERNELS**

!. Polynomial kernel

2. Linear Kernel

3.. Radian basis function

4. sigmoid

**!. Polynomial kernel**

It is defined by K(x1, x2) = (x1 . x2 + 1) d , d is the degree of the polynomial and x1 and x2 are vectors

**2. Linear Kernel**

linear kernel is defined by the dot product of these two vectors K(x1, x2) = x1 . x2

**3.. Radian basis function**

K(X,X’) = exp (-||x-x’||^2/2 sigma^2)

X,X’ = input vectors

||x-x’||^2 = squared eculidean distance

Sigma = spreadness of kernel bandwidth