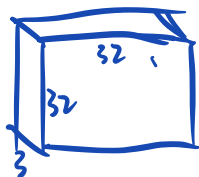


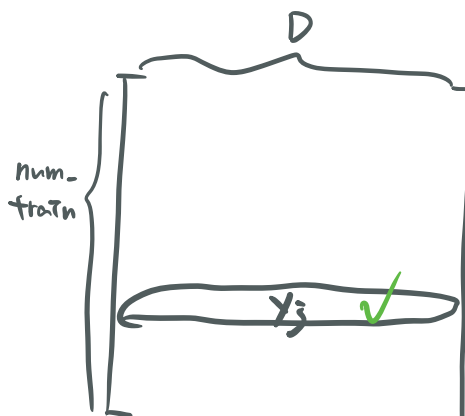
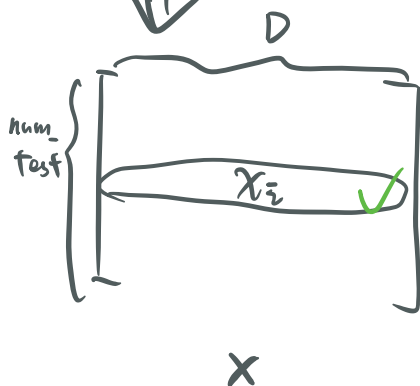
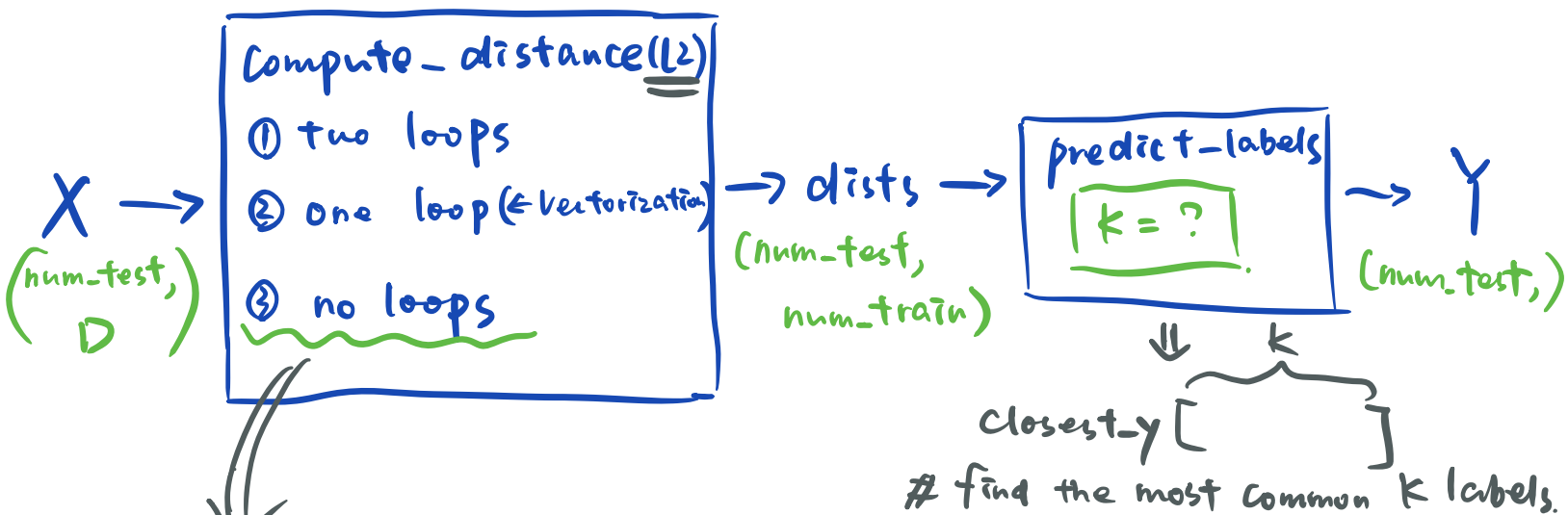
Training 50000  
(5000)

Testing 10000  
(500)



$$D = 32 \times 32 \times 3 = 3072$$

Classes 10



$$\Rightarrow \text{dist}[i, j]$$

$Y$  (train data not label)

$$(X - Y)^2 = X^2 + Y^2 - \underline{2XY}$$

"element-wise"

i.e.

$$\text{np.sum}(X^2, \text{axis}=1)$$



$$\text{np.sum}(Y^2, \text{axis}=1)$$

reshape



$$\text{np.dot}(X, Y.T)$$



broadcasting.