

[CLick here to download IPYTHON notes for this lecture](#)

correction: The formula for covariance matrix is  $1/n * (X^T * X)$  (we missed out in  $1/n$  in the video)

there is a typo in the ipython notebook, as eigenvalues generated are in ascending order, when we multiply `vector*sample_data^T`  
`vector[0]*X[i]` will be second principle component  
`vector[1]*x[i]` will be first principle component