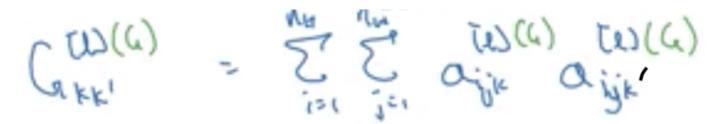
Style Cost *CORRECTION*

Please note that in the next video at around 8:50 when Andrew wrote down the second formula of matrix, the second factor of the multiplication should be on index k' (k prime), not k (otherwise it does not calculate any kind of covariance). This is shown in black below.



So the formula should be:

$$G_{kk'}^{[l](G)} = \sum_{i=1}^{n_H} \, \sum_{j=1}^{n_W} \, a_{i,j,k}^{[l](G)} a_{i,j,k'}^{[l](G)}.$$

Also at 11:08 the style cost function formula should be the squared difference:

$$(G_S - G_G)^2$$

instead of just the difference:

$$(G_S - G_G)$$
.

The style cost function should be:

$$J_{style}^{[l]}(S,G) = \frac{1}{(2n_H^{[l]}n_W^{[l]}n_C^{[l]})^2} \sum_{k} \sum_{k'} \left(G_{kk'}^{[l](S)} - G_{kk'}^{[l](G)} \right)^2$$