Let be a_i and b_j Vectors
and X,Y Matrixes
Maximize $\Sigma \mathrm{diag}(XY)$
s.t.
$\Sigma_i^n (X^2)_{i,j} \leq a_i$
$\Sigma_j^n (X_{i,j})^2 \leq b_j$
$\Sigma_i^n (Y^2)_{i,j} \leq a_i$
$\Sigma_j^n (Y_{i,j})^2 \leq b_j$