$$\Sigma = \left[egin{array}{ccccc} \sigma_{1,1} & \sigma_{1,2} & \dots & \sigma_{1,n} \ \sigma_{2,1} & \sigma_{2,2} & \dots & \sigma_{2,n} \ dots & dots & \ddots & dots \ \sigma_{n,1} & \sigma_{n,2} & \dots & \sigma_{n,n} \end{array}
ight]$$