$X = (x_1, ..., x_k)^T$ is a random vector with covariance Σ. If $X_1, .., X_n$ is a sequenced of i.i.d. copies of X then, $\sum_{i=1}^{n} \frac{X_i}{n} \rightarrow N(E[X], \Sigma \frac{1}{\sqrt{n}})$