Exercise 1 An urn is filled with three balls numbered 1, 2 and 3. We pull two random balls from this urn, we note X_1 and X_2 the corresponding random variables (Zufallsvariablen).

   a) Before computing the covariance (Covarianz) of X_1 and X_2, try to guess if it is positive or negative.

   b) compute the covariance of X_1 and X_2.