In this bachelor thesis, selected probability distributions which might appear useful for financial losses modelling are presented. Losses, risk measures and an example with a normality assumption are defined in the first part. Among others, the following distributions are presented in the second part: asymmetric Laplace distribution, skew normal distribution and generalized hyperbolic distribution. We present selected theoretical properties of these distributions. Procedures of a derivation of two asymmetric distributions from their symmetric cases are described. The asymmetric Laplace distribution is described more in detail, we also listed the maximum likelihood estimation with its implementation in software Wolfram Mathematica 10. The third part is a short numerical study, where an application of selected distributions is presented on real market data. Test of randomness and goodness of fit tests are performed.