Musical songs are ordinary part of our lives. Musical harmony is one of basic property for describing songs and also it ist large part of musical theory. By knowing musical harmony of some song, we can easily reproduce musical accompaniment. In introduction this thesis explain neccesary theory and possible ways of solving this problem. Next par is implementation of application for automatic chord recognition. Application provides graphical visualizations of sund spectrum and chord recognition data. After importing referention values application provides comparison of analysis efficiency. At the end of thesis is conclusion about efficiency of application detection algorithm.