

The goal of this thesis is to design and implement a SQL frontend for Bobox framework which is being developed by Department of software engineering MFF UK. The development of the Bobox framework is motivated by the effort to simplify writing parallel software. The Bobox framework is one of many system implementations for processing stream data and provides runtime environment for evaluating execution plans in the parallel environment. This thesis deals with implementation of a frontend for this framework. The input is a query in SQL language and information about database structure. Frontend will perform syntactic and semantic analysis and then translate the input query into intermediate code. The output of this frontend is the intermediate code in the form of relational algebra written as XML and is used as the input for the following optimizing backend.