Lab 1: Symmetric Encryption

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Abstract

In this paper we will address a set of reachability problems within a subset of c. These problems will be addressed by a set of tools that allow us to convert the code into one counter machines. These one counter machines can be analyzed for dead code as described by Daniel Bundala and Joal Ouaknine. The code itself will first be analyzed by a compiler. This compiler will result in an abstract syntax tree that can be converted into the final one counter machine. The analysis of those one counter machines will not be part of this paper.

Contents

1 Introduction

This paper will give a brief description of the process that is used to generate one counter machines starting from c code. The conversion will start of by making use of a compiler, followed by a sequence of conversions which will eventually result in a one counter machine. These one counter machines can be used to perform dead code analysis as described by Daniel Bundela and Joal Ouaknine.