

# Lab 4: Bounds Check Analysis

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## 1 Introduction

This report describes the performance of three different IR representations of a single C program, `bubble_sort.c`. The first IR representation is the standard representation without the function pass. The second IR representation creates a branch at each `getelementptr` instruction. The third representation is an optimisation of the second, NOG UITLEGGEN WAT GEOPTIMALISEERD IS.

## 2 Analysis

To perform the analysis, the program `bubble_sort.c` is executed 30 times for each representation. Afterwards, average statistics can be calculated for each representation.