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Data structures & Algorithms

Reading Week 7

What information does callgrind provide?

It provides annotations like the number of times a function executes and the total number of instructions that are executed as a result.

What is function inlining? Why would it speed up the code? What is the disadvantage?

It is taking the body of a function and putting it into the main body. It could possibly bring down the amount of excessive calls and make it easier for the compiler to identify improvements. It’s not always a good thing. By using function inlining you can make your code harder to read.

What is loop unrolling? Why would it speed up your code? What is the disadvantage?

It’s a type of optimizing that the compilers does to reduce the number of wrong guesses. By reducing the number of iterations in a loop you can sometimes speed up the program. It can reduce code readability.

What questions do you have about the reading?

Is it always a good thing to sacrifice readability for optimization?