Lab B Part 2

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1 Getting Started

1.1 Process on s1 and s2

The process function returned the answer 73i32.
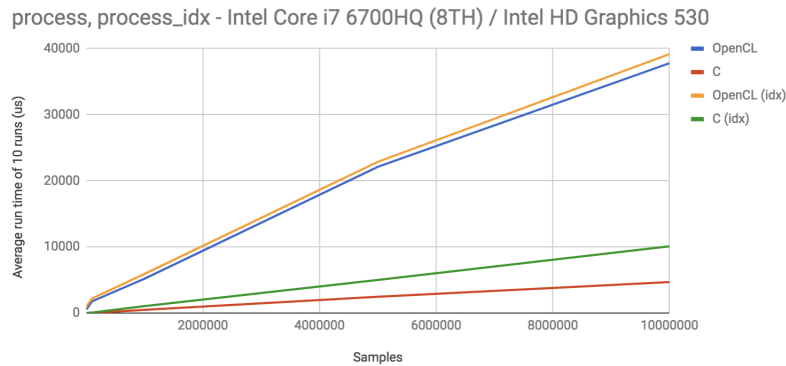
1.2 Testing on generated data

Figure 1: Performance results for process and process_idx

1.3 Neutral elements

Since the if statement goes to its default state for $f_2 = true$ and or only will be set to true if f_1 is set to true (f_2 is false as a result of the if statement), false has to be the neutral element since the or operator would not have any meaning otherwise.

1.4 Segmented functions

To be completed.

2 Monte Carlo

2.1 Computation Times

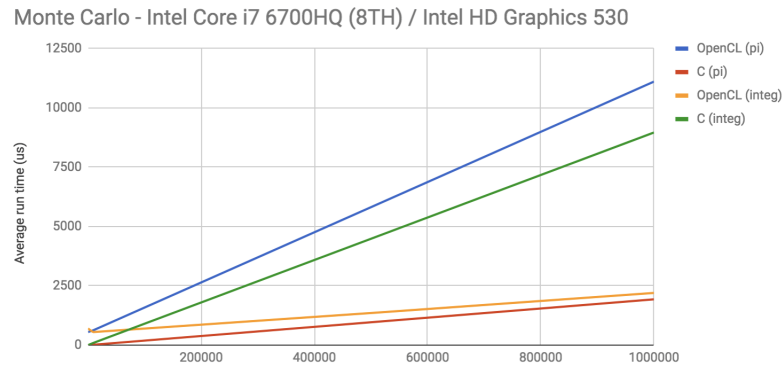Monte Carlo - Intel Core i7 6700HQ (8TH) / Intel HD Graphics 530

Figure 2: Performance results for monte carlo approximations of pi and integral

2.2 Sobol

The approximation converges faster with the sobol generated random numbers.

3 2D Ising simulation

Not completed.