CS214 Systems Programming
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SPOOKY SEARCHING: TEST PLAN

Part 1: Experimenting with Array Size

- The goal of this workload was to determine the effectiveness of using processes and threads to search arrays of different sizes.
- Each data point is the average of 50 trials.

Workload A

- Testing arrays of size 250 to 20,000, keeping subarray size consistent at 250 elements. We incremented array size by 50 between each iteration.

Part 2: Experimenting with Number of Branches

- The goal of these workloads were to determine how increasing parallelism affects the runtime of our search.
- Several array sizes were tested, to see if increased parallelism had different effects on arrays of different sizes.
- Each data point is the average of 50 trials.

Workload B

- Keeping array size consistent at 1,000, we increase the number of contexts from 8-60.

Workload C

- Keeping array size consistent at 5,000, we increase the number of contexts from 20-70.

Workload D

- Keeping array size consistent at 10,000, we increase the number of contexts from 40-90.

Workload E

- Keeping array size consistent at 20,000, we increase the number of contexts from 80-130.