Lab 6 Report

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October 17, 2021

Contents

1. Booting directly

2. "

3. "

4. "

5. "

6. 602Mb

7. The code gets the sum or product of the elements in v. The elements' type and the operation are defined in config.h. It stores the sum/product in the variable dest.

8. 12080 MiB free = 12666800000 bytes, 12666800000 / 4 bytes/int = 3166700000.0 ints

9. 3000000000 elements

10.

	compile time (s)
no optimization	0.41
-O1	0.39
-O2	0.47
-O3	0.58

11.

	runtime
no optimization	37.3
-O1	22.028
-O2	19.63
-O3	12.72

12.

Configuration	Vector size (elements)	vector size (MB)	time for integer add	time for integ
combine1	3000000000	11444	12.595	
combine2	3000000000	11444	7.856	
combine3	3000000000	11444	2.234	
combine4	3000000000	11444	1.589	
combine5x2	3000000000	11444	1.016	
combine5x3	3000000000	11444	1.043	
combine6	3000000000	11444	0.972	

13.