Alex Banning

February 28th, 2020

HW5 – Computer Architecture

homework5.cpp output

abanning@ada:~/ComputerArchitecture/HW5$ g++ homework5.cpp

abanning@ada:~/ComputerArchitecture/HW5$ ./a.out

WARNING! Entering a value of n larger than 92

will result in sign overflow and an incorrect Fibonacci

value. Best results come from 10 < n < 90.

Please enter a value for n: 90

Fibonacci(90)ITERATIVE

-------------------------------------------------------------------

Trial: 1

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 2

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 3

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 4

Result: 2880067194370816120

Time duration: 2 us

-------------------------------------------------------------------

Trial: 5

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 6

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 7

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 8

Result: 2880067194370816120

Time duration: 13 us

-------------------------------------------------------------------

Trial: 9

Result: 2880067194370816120

Time duration: 2 us

-------------------------------------------------------------------

Trial: 10

Result: 2880067194370816120

Time duration: 2 us

Average time: 2.5 us

Fibonacci(90)RECURSIVE

-------------------------------------------------------------------

Trial: 1

Result: 2880067194370816120

Time duration: 0 us

-------------------------------------------------------------------

Trial: 2

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 3

Result: 2880067194370816120

Time duration: 0 us

-------------------------------------------------------------------

Trial: 4

Result: 2880067194370816120

Time duration: 0 us

-------------------------------------------------------------------

Trial: 5

Result: 2880067194370816120

Time duration: 0 us

-------------------------------------------------------------------

Trial: 6

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 7

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 8

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 9

Result: 2880067194370816120

Time duration: 1 us

-------------------------------------------------------------------

Trial: 10

Result: 2880067194370816120

Time duration: 1 us

Average time: 3.1 us