CSE 102-COMPUTER PROGRAMMING -HOMEWORK 10

This program aims to read numbers(1-1.000.000) from a file called "data.txt" and it writes these numbers in to two data structures. One is a linked list and other one is a dynamically allocated array. Also this program prints and writes prime numbers into output_prime_dynamic_array.txt and output_prime_linked_list.txt files using record_to_array and record_to_linked_list functions. These functions also calculate the time passing between the calculations of 1-500.000, 1-750.000,1-1.000.000 by using gettimeofday function from the library sys/time.h. Found the totally time passing by differentiating ending and starting value of the time, then converted it to milliseconds. These time values are also written in to output_prime_dynamic_array.txt and   output_prime_linked_list.txt files.

Here are some screenshots of the files and the program runnings.

Program output for record_to_array(just the ending since numbers are too much to capture).
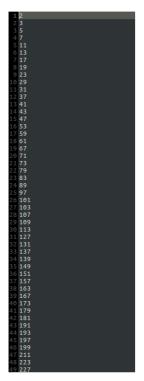

File output for record_to_array
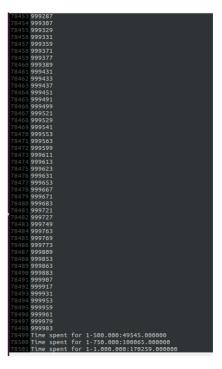(start of the file to show the first values)

File output for record_to_array
(ending of the file to show last values)

Program output for record_to_linked_list(just the ending since numbers are too much to capture).

File output for record_to_linked_list
(start of the file to show the first values)

File output for record_to_linked_list
(ending of the file to show last values)