Prime_Number_Solver_Vector_Version_4 (Calls: 1, Time: 0.847 s)

Generated 17-Jul-2023 20:20:43 using performance time.
Script in file G:\.shortcut-targets-by-id\1FDIvj8mfMGVPmzoguheuOUy-VJPYsRSg\ePortfolio\Personal\MATLAB Fun\Prime Numbe Solver\Prime_Number_Solver_Vector_Version_4.m
Copy to new window for comparing multiple runs

Parents (calling functions)

No parent

Lines that take the most time

Line Number	Code	Calls	Total Time (s)	% Time	Time Plot
22	`numbers(numbers ~= remove & mod(numbe…`	268	0.740	87.4%	
3	`clf`	1	0.049	5.8%	
4	`close all`	1	0.045	5.4%	
23	`test(mod(test, remove) == 0) = [];`	268	0.006	0.7%	
13	`numbers = 1:2:max;`	1	0.003	0.3%	
All other lines			0.004	0.5%	
Totals			0.847	100%	

Children (called functions)

Function Name	Function Type	Calls	Total Time (s)	% Time	Time Plot
clf	Function	1	0.049	5.8%	
close	Function	1	0.045	5.3%	
Self time (built-ins, overhead, etc.)			0.753	88.9%	
Totals			0.847	100%	

Code Analyzer results

Coverage results

Show coverage for parent folder

Total lines in function	27
Non-code lines (comments, blank lines)	8
Code lines (lines that can run)	19
Code lines that did run	19
Code lines that did not run	0
Coverage (did run/can run)	100.00 %

Function listing

Time	Calls	Line	
< 0.001	1	1	clear
< 0.001	1	2	clc
0.049	1	3	clf
0.045	1	4	close all
< 0.001	1	5	format long
		6	
		7	%3000000 will take around 0.620596 sec and have 216816 primes
< 0.001	1	8	tic
< 0.001	1	9	max = 3000000;
< 0.001	1	10	stoppingPoint = floor(sqrt(max));
		11	
		12	%Creates a vector of all odd numbers
0.003	1	13	numbers = 1:2:max;
		14	%Adds 2 and removes 1
< 0.001	1	15	numbers(1) = 2;
		16	%Creates Vector of all test values
< 0.001	1	17	test = 3:2:stoppingPoint;
		18	%Goes through each test value
< 0.001	1	19	while (not(isempty(test)))
< 0.001	268	20	remove = test(1);
		21	%Removes all values evenly divisible by the selected test value
0.740	268	22	numbers(numbers ~= remove & mod(numbers, remove) == 0) = [];
0.006	268	23	test(mod(test, remove) == 0) = [];
0.002	268	24	end
< 0.001	1	25	toc
< 0.001	1	26	disp(length(numbers))
< 0.001	1	27	disp("Done")