Prime_Number_Solver_Vector_Version_6 (Calls: 1, Time: 0.036 s)

Generated 17-Jul-2023 20:39:47 using performance time.
Script in file G:\.shortcut-targets-by-id\1FDIvj8mfMGVPmzoguheuOUy-VJPYsRSg\ePortfolio\Personal\MATLAB Fun\Prime Number Solver\Prime_Number_Solver_Vector_Version_6.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
19	`isPrime(remove) = 0;`	268	0.011	29.1%	
23	`numbers(not(isPrime)) = [];`	1	0.006	15.3%	
18	`remove(1) = [];`	268	0.005	14.9%	
17	`remove = start:i:length(numbers);`	268	0.005	14.4%	
9	`numbers = 1:2:max;`	1	0.003	8.7%	
All other lines			0.006	17.7%	
Totals			0.036	100%	

Children (called functions)

No children

Code Analyzer results

Coverage results

Show coverage for parent folder

Total lines in function	26
Non-code lines (comments, blank lines)	5
Code lines (lines that can run)	21
Code lines that did run	21
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
                    3
                    4  %3000000 will take around 0.034346 sec and have 216816 primes
```

< 0.001	1	5	tic
< 0.001	1	6	max = 3000000;
< 0.001	1	7	stoppingPoint = floor(sqrt(max));
		8	
0.003	1	9	numbers = 1:2:max;
< 0.001	1	10	numbers(1) = 2;
< 0.001	1	11	isPrime = true(1, length(numbers));
< 0.001	1	12	test = 3:2:stoppingPoint;
		13	
< 0.001	1	14	while(not(isempty(test)))
< 0.001	268	15	i = test(1);
< 0.001	268	16	start = i - ceil(i / 2) + 1;
0.005	268	17	remove = start:i:length(numbers);
0.005	268	18	remove(1) = [];
0.011	268	19	isPrime(remove) = 0;
		20	
0.002	268	21	test(mod(test, i) == 0) = [];
< 0.001	268	22	end
0.006	1	23	numbers(not(isPrime)) = [];
< 0.001	1	24	toc
< 0.001	1	25	disp(length(numbers))
< 0.001	1	26	disp("Done")