

Prime_Number_Solver_Vector_Version_9 (Calls: 1, Time: 0.011 s)

Generated 18-Jul-2023 12:29:08 using performance time.
Script in file [G:\shortcut-targets-by-id\1FDIvj8mfMGVPmzoguheuOUy-VJPYsRSg\Portfolio\Personal\MATLAB Fun\Prime Number Solver\Prime_Number_Solver_Vector_Version_9.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
16	numbers = find(isPrime) * 2 - 1;	1	0.005	42.8%	<div></div>
13	isPrime(((i^2 + 1) / 2):i:length(isP...	268	0.003	23.4%	<div></div>
9	isPrime = true(1, ceil(max / 2));	1	0.001	4.7%	<div></div>
1	clear	1	0.000	4.0%	<div></div>
2	clc	1	0.000	3.7%	<div></div>
All other lines			0.002	21.3%	<div></div>
Totals			0.011	100%	

Children (called functions)

No children

Code Analyzer results

Coverage results

[Show coverage for parent folder](#)

Total lines in function	22
Non-code lines (comments, blank lines)	6
Code lines (lines that can run)	16
Code lines that did run	16
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 0.006841 sec and have 216816 primes

```
< 0.001      1      5      tic
              1      6      max = 3000000;
< 0.001      1      7      stoppingPoint = floor(sqrt(max));
              8
< 0.001      1      9      isPrime = true(1, ceil(max / 2));
              10
< 0.001      1     11      for i = 3:2:stoppingPoint
< 0.001     865     12          if(isPrime((i + 1) / 2))
0.003     268     13              isPrime(((i^2 + 1) / 2):i:length(isPrime)) = false;
< 0.001     865     14          end
< 0.001     865     15      end
0.005        1     16      numbers = find(isPrime) * 2 - 1;
              1     17      numbers(1) = 2;
< 0.001      1     18      toc
< 0.001      1     19      disp(length(numbers))
              20      %test = find(~isprime(numbers));
              21      %all(numbers == primes(max))
< 0.001      1     22      disp("Done")
```
