# Prime\_Number\_Solver\_Vector\_Version\_3 (Calls: 1, Time: 2.443 s)

Generated 17-Jul-2023 20:14:48 using performance time.

Script in file <u>G:\.shortcut-targets-by-id\1FDIvj8mfMGVPmzoguheuOUy-VJPYsRSg\ePortfolio\Personal\MATLAB Fun\Prime Number Solver\Prime Number Solver Version 3.m</u>

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 Plot
<u>15</u>	numbers(numbers ~= i & mod(numbers,	1732	2.327	95.3%	
3	clf	1	0.060	2.5%	1
4	close all	1	0.043	1.8%	I
12	<pre>numbers = linspace(2, max, max - 1);</pre>	1	0.010	0.4%	1
<u>16</u>	end	1732	0.001	0.0%	
All other lines			0.002	0.1%	
Totals			2.443	100%	

## Children (called functions)

Function Name	Function Type	Calls	Total Time (s)		Time Plot
clf	Function	1	0.060	2.5%	I
close	Function	1	0.043	1.8%	I
linspace	Function	1	0.009	0.4%	
Self time (built-ins, overhead, etc.)			2.331	95.4%	
Totals			2.443	100%	

## **Code Analyzer results**

## Coverage results

#### Show coverage for parent folder

Total lines in function	19	9	
Non-code lines (comments, blank lines)		4	
Code lines (lines that can run)		15	
Code lines that did run		15	
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
0.060
            1
                 3 clf
 0.043
            1
                 4 close all
< 0.001
            1
                 5 format long
                 7
                   %3000000 will take around 2.191731 sec and have 216816 primes
< 0.001
            1
                 8
< 0.001
            1
                 9
                   max = 3000000;
< 0.001
            1
                10
                    stoppingPoint = ceil(sqrt(max));
                11
 0.010
            1
                12
                    numbers = linspace(2, max, max - 1);
                13
< 0.001
            1
                14
                   for i = 2:stoppingPoint
 2.327
         1732
                15
                    numbers(numbers ~= i & mod(numbers, i) == 0) = [];
< 0.001
         1732
                16
                   end
< 0.001
            1
                17
                   toc
< 0.001
            1
                18 disp(length(numbers))
< 0.001
            1
                19 disp("Done")
```