# Prime\_Number\_Solver\_Vector\_Version\_5 (Calls: 1, Time: 0.256 s)

Generated 17-Jul-2023 20:30:06 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 5.m</u>

Copy to new window for comparing multiple runs

## Parents (calling functions)

No parent

#### Lines that take the most time

Line Number	Code		Total 7		Time Plot
<u>19</u>	<pre>isPrime(remove) = 0;</pre>	1731	0.087	34.0%	
3	clf	1	0.046	18.0%	
4	close all	1	0.044	17.3%	
17	remove = i:i:max;	1731	0.033	12.9%	
18	remove(1) = [];	1731	0.028	11.1%	
All other lines			0.017	6.7%	1
Totals			0.256	100%	

### Children (called functions)

Function Name	Function Type	Calls	Total Time (s)	% Time	Time Plot
clf	Function	1	0.046	17.9%	
close	Function	1	0.044	17.3%	
Self time (built-ins, overhead, etc.)			0.166	64.9%	
Totals			0.256	100%	

## **Code Analyzer results**

# Coverage results

#### Show coverage for parent folder

Total lines in function	24	
Non-code lines (comments, blank lines)	4	
Code lines (lines that can run)	20	
Code lines that did run	20	
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 clf
0.046
            1
 0.044
            1
                 4 close all
< 0.001
            1
                 5
                    format long
                 6
                 7
                    %3000000 will take around 0.138470 sec and have 216816 primes
< 0.001
            1
                 8
                    tic
            1
                    max = 3000000;
< 0.001
                 9
< 0.001
                    stoppingPoint = floor(sqrt(max));
            1
                10
                11
 0.006
            1
                12
                    numbers = 1:1:max;
< 0.001
            1
                13
                    isPrime = true(1, max);
< 0.001
            1
                    isPrime(1) = 0;
                14
                15
< 0.001
            1
                16
                    for i = 2:stoppingPoint
                    remove = i:i:max;
 0.033
         1731
                17
                    remove(1) = [];
 0.028
         1731
                18
 0.087
                    isPrime(remove) = 0;
         1731
                19
< 0.001
         1731
                20
                    end
< 0.001
            1
                21
                    toc
 0.008
            1
                22
                    numbers(not(isPrime)) = [];
< 0.001
            1
                23
                   disp(length(numbers))
< 0.001
            1
                24 disp("Done")
```