

## Prime\_Number\_Solver\_Vector\_Version\_2 (Calls: 1, Time: 8.157 s)

Generated 17-Jul-2023 19:49:58 using performance time.






Script in file [G:\shortcut-targets-by-id\1FDlvj8mfMGVPmzoguheuOUy-VJPYsRSglePortfolio\Personal\MATLAB Fun\Prime Number Solver\Prime\\_Number\\_Solver\\_Vector\\_Version\\_2.m](#)

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### Parents (calling functions)

No parent

### Lines that take the most time

Line Number	Code	Calls	Total Time (s)	% Time	Time Plot
<a href="#">17</a>	<code>numbers = setdiff(numbers, remove);</code>	1732	7.842	96.1%	
<a href="#">3</a>	<code>clf</code>	1	0.142	1.7%	
<a href="#">4</a>	<code>close all</code>	1	0.059	0.7%	
<a href="#">15</a>	<code>remove = i:i:max;</code>	1732	0.047	0.6%	
<a href="#">16</a>	<code>remove(1) = [];</code>	1732	0.040	0.5%	
All other lines			0.027	0.3%	
Totals			8.157	100%	

### Children (called functions)

Function Name	Function Type	Calls	Total Time (s)	% Time	Time Plot
<a href="#">setdiff</a>	Function	1732	7.676	94.1%	
<a href="#">clf</a>	Function	1	0.142	1.7%	
<a href="#">close</a>	Function	1	0.058	0.7%	
<a href="#">linspace</a>	Function	1	0.011	0.1%	
Self time (built-ins, overhead, etc.)			0.269	3.3%	
Totals			8.157	100%	

### Code Analyzer results

#### Coverage results

[Show coverage for parent folder](#)

Total lines in function	21
Non-code lines (comments, blank lines)	4
Code lines (lines that can run)	17
Code lines that did run	17
Code lines that did not run	0

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**Function listing**

Time	Calls	Line	
< 0.001	1	<u>1</u>	clear
0.001	1	<u>2</u>	clc
0.142	1	<u>3</u>	clf
0.059	1	<u>4</u>	close all
0.001	1	<u>5</u>	format long
		6	
		7	%3000000 will take around 7.434608 sec and have 216816 primes
< 0.001	1	<u>8</u>	tic
< 0.001	1	<u>9</u>	max = 3000000;
< 0.001	1	<u>10</u>	stoppingPoint = ceil(sqrt(max));
		11	
0.012	1	<u>12</u>	numbers = linspace(2,max, max - 1);
		13	
< 0.001	1	<u>14</u>	for i = 2:stoppingPoint
0.047	1732	<u>15</u>	remove = i:i:max;
0.040	1732	<u>16</u>	remove(1) = [];
7.842	1732	<u>17</u>	numbers = setdiff(numbers, remove);
0.003	1732	<u>18</u>	end
0.002	1	<u>19</u>	toc
0.006	1	<u>20</u>	disp(length(numbers))
< 0.001	1	<u>21</u>	disp("Done")

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