

bruteForce (Calls: 500, Time: 31.073 s)

Generated 01-июн.-2021 13:42:32 using performance time.
Function in file E:\course_4\code\bruteForce.m
[Copy to new window for comparing multiple runs](#)

Parents (calling functions)

Function Name	Function Type	Calls
ImageProcessing	Script	500

Lines that take the most time

Line Number	Code	Calls	Total Time (s)	% Time	Time Plot
17	if(imageGS(y, x) ~= 0)	155974628	6.187	19.9%	<div></div>
32	end	155954147	5.261	16.9%	<div></div>
28	if (columnFlag)	155227826	5.038	16.2%	<div></div>
27	else	155227826	4.730	15.2%	<div></div>
30	end	155207345	4.717	15.2%	<div></div>
All other lines			5.138	16.5%	<div></div>
Totals			31.073	100%	

Children (called functions)

No children

Code Analyzer results

Line Number	Message
18	The variable 'coloredX' appears to change size on every loop iteration. Consider preallocat...
19	The variable 'coloredY' appears to change size on every loop iteration. Consider preallocat...
42	Using ISEMPTY is usually faster than comparing LENGTH to 0.
42	Using ISEMPTY is usually faster than comparing LENGTH to 0.

Coverage results

[Show coverage for parent folder](#)

Total lines in function	50
Non-code lines (comments, blank lines)	10
Code lines (lines that can run)	40
Code lines that did run	40
Code lines that did not run	0
Coverage (did run/can run)	100.00 %

Function listing

Time	Calls	Line
		1 function [bruteX, bruteY] = bruteForce(imageGS)
< 0.001	500	2 pxH = length(imageGS);
0.004	500	3 pxW = length(imageGS(1, :));
		4
< 0.001	500	5 columns = pxH;
< 0.001	500	6 rows = pxW;
		7
< 0.001	500	8 coloredX = [];
< 0.001	500	9 coloredY = [];
		10
< 0.001	500	11 isFlag = false;
< 0.001	500	12 isFlag2 = false;
		13
< 0.001	500	14 for y = 1 : rows
0.009		

0.009	217123	<u>16</u>	for x = 1 : columns
6.187	155974628	<u>17</u>	if(imageGS(y, x) ~= 0)
0.180	746802	<u>18</u>	coloredX(end + 1) = x;
0.127	746802	<u>19</u>	coloredY(end + 1) = y;
		20	
0.022	746802	<u>21</u>	columnFlag = true;
0.023	746802	<u>22</u>	isFlag2 = true;
		23	
0.024	746802	<u>24</u>	if (length(coloredX) == 1)
< 0.001	450	<u>25</u>	isFlag = true;
0.022	746802	<u>26</u>	end
4.730	155227826	<u>27</u>	else
5.038	155227826	<u>28</u>	if (columnFlag)
0.001	20481	<u>29</u>	break;
4.717	155207345	<u>30</u>	end
4.660	155954147	<u>31</u>	end
5.261	155954147	<u>32</u>	end
0.009	217123	<u>33</u>	if (isFlag)
0.001	20955	<u>34</u>	if (~isFlag2)
< 0.001	449	<u>35</u>	break;
0.001	20506	<u>36</u>	end
0.008	216674	<u>37</u>	end
0.008	216674	<u>38</u>	isFlag2 = false;
		39	
0.011	216674	<u>40</u>	end
		41	
0.001	500	<u>42</u>	if (length(coloredX) == 0 length(coloredY) == 0)
< 0.001	50	<u>43</u>	bruteX = 0;
< 0.001	50	<u>44</u>	bruteY = 0;
< 0.001	50	<u>45</u>	return;
< 0.001	450	<u>46</u>	end
		47	
0.001	450	<u>48</u>	bruteX = ceil(sum(coloredX) / length(coloredX));
< 0.001	450	<u>49</u>	bruteY = ceil(sum(coloredY) / length(coloredY));
0.009	450	<u>50</u>	end
