
Subject: data criteria

Posted by [anil](#) on Mon, 24 Aug 2009 14:33:16 GMT

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Hi all,

I do not have much information about programming or algorithms (actually IDL is my first programming language), so my question may rather be simple but i could not figure it out , so here we go:

I have lots of data such as:

```
7.200000 23.789000 18.014000 23.788000 10.895200
9.300000 23.786000 18.025000 23.784000 10.904400
14.700000 23.284000 18.156000 23.281000 11.138100
19.800000 16.863000 18.145000 16.860000 12.654200
24.600000 9.811000 18.199000 9.809000 13.895200
29.700000 9.041000 18.234000 9.039000 14.020000
34.700000 8.627000 18.258000 8.624000 14.088300
39.700000 8.575000 18.378000 8.572000 14.188100
44.800000 8.063000 18.638000 8.060000 14.449600
49.700000 7.925000 19.161000 7.921000 14.873900
54.700000 7.987000 19.425000 7.983000 15.073500
59.900000 8.037000 19.755000 8.032000 15.325900
64.600000 8.079000 19.985000 8.074000 15.501000
69.500000 8.119000 20.130000 8.114000 15.609800
74.400000 8.174000 20.265000 8.168000 15.709000
79.700000 8.214000 20.402000 8.208000 15.811400
84.400000 8.248000 20.509000 8.241000 15.891100
89.600000 8.269000 20.599000 8.262000 15.958900
94.300000 8.289000 20.689000 8.281000 16.026900
99.600000 8.310000 20.763000 8.302000 16.082300
109.000000 8.370000 20.893000 8.361000 16.176800
119.200000 8.439000 21.022000 8.429000 16.269300
129.500000 8.502000 21.138000 8.491000 16.352300
139.400000 8.548000 21.222000 8.536000 16.412300
149.500000 8.587000 21.294000 8.574000 16.463800
159.100000 8.625000 21.360000 8.611000 16.510800
169.400000 8.654000 21.413000 8.639000 16.548600
179.000000 8.679000 21.460000 8.664000 16.582300
189.200000 8.700000 21.505000 8.684000 16.614900
199.200000 8.719000 21.543000 8.702000 16.642300
208.900000 8.732000 21.571000 8.714000 16.662600
219.200000 8.747000 21.606000 8.728000 16.688100
229.400000 8.760000 21.638000 8.740000 16.711600
239.400000 8.771000 21.666000 8.750000 16.732100
249.400000 8.782000 21.693000 8.760000 16.751900
259.400000 8.792000 21.719000 8.769000 16.771100
269.300000 8.802000 21.748000 8.778000 16.792500
279.100000 8.810000 21.768000 8.785000 16.807200
```

289.200000	8.817000	21.791000	8.791000	16.824400
298.800000	8.823000	21.809000	8.797000	16.837800
323.800000	8.836000	21.854000	8.807000	16.871500
349.600000	8.848000	21.894000	8.817000	16.901500
374.200000	8.856000	21.926000	8.823000	16.925800
399.000000	8.863000	21.957000	8.827000	16.949300
424.300000	8.870000	21.987000	8.832000	16.972200
449.400000	8.875000	22.013000	8.834000	16.992100
474.200000	8.879000	22.036000	8.836000	17.009800
499.400000	8.883000	22.061000	8.838000	17.029100
524.300000	8.886000	22.081000	8.838000	17.044700
549.000000	8.889000	22.103000	8.839000	17.061700
574.200000	8.892000	22.121000	8.840000	17.075700
599.100000	8.895000	22.138000	8.840000	17.088900
648.900000	8.901000	22.166000	8.841000	17.110600
699.500000	8.907000	22.190000	8.842000	17.129200
749.000000	8.914000	22.214000	8.845000	17.147600
799.200000	8.922000	22.233000	8.848000	17.162100
849.100000	8.930000	22.248000	8.851000	17.173400
899.400000	8.940000	22.263000	8.855000	17.184400
949.000000	8.948000	22.274000	8.858000	17.192600
999.100000	8.957000	22.284000	8.862000	17.199900
1048.900000	8.965000	22.291000	8.865000	17.205000
1099.200000	8.973000	22.297000	8.868000	17.209400
1149.200000	8.982000	22.302000	8.872000	17.212800
1199.400000	8.989000	22.306000	8.873000	17.215700
1249.400000	8.997000	22.309000	8.876000	17.217700
1299.200000	9.005000	22.312000	8.879000	17.219700
1349.100000	9.012000	22.314000	8.880000	17.221000
1399.200000	9.020000	22.316000	8.883000	17.222200
1449.000000	9.027000	22.318000	8.884000	17.223600
1499.200000	9.034000	22.319000	8.886000	17.224200
1542.300000	9.040000	22.320000	8.887000	17.224800
1549.700000	9.041000	22.320000	8.887000	17.224800

The 5th column of this data is my area of interest. I want to take the data(with all 5 columns of corresponding to the line) where the difference between consecutive lines is smaller than 0.3 . For example for this data, i have

10.895200
 10.904400
 11.138100
 12.654200

.....

So I want to take the lines from the first line up to 12.654200(since the difference is more than 0.3)

What i have done so far is :

```

pro a
;window, 0, retain=2

file_array=file_search('/home/...../0587', '0587.*.txt',
count=num_file)
for i=0,num_file-1 do begin
file=file_array(i)

nrows = File_Lines(file)

data=fltarr(5,nrows)

OpenR, lun, file, /GET_LUN
ReadF, lun, data
Free_Lun, lun

p=data(0,*)
t=data(1,*)
s=data(2,*)
q=data(3,*)
d=data(4,*)
close,lun
free_lun, lun

1st try
;for k=1,nrows-2 do begin k=k+1
;ml=where((d(k+1)-d(k)) gt 0.3,ss)
;endfor

2nd try
;k=1
;repeat begin ml=(d(k)-d(k-1))
;k=k+1
;endrep until (ml gt 0.3)
;print,d(0:k)

free_lun,lun
endfor

close,/All
end

```

Neither of them work ! I used an if-then-else statement too but could not solve my problem.
I would really appreciate any help. Thanks in advance,
ANIL
