Weekly Report

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Summary:

Almost finish combining tktable and pandas, and also make the code more easy to read and reused. Now the table can sort thing easily, and I also add one more row called 'Report Name' to show the which report does the data come from. The user can choose to show the 'Report Name' row or not.

Issue:

Old issue but emphasis again:

I did not spend time on finding ways making tktable works on Windows, which means now it only works on Linux. If someone runs the example code I post on github, it must be on Mac, Linux or Unix. Make sure you install the tktable first. The way to install tkatable is in my previous weekly report 4.
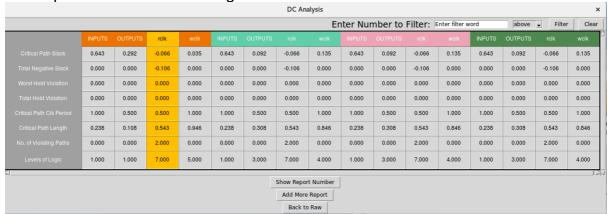
Data:

I run the code on fedora (a version of Linux) this time to give some visualize example that how does tktable look likes on Linux.

Open four report: (just by click add more report)

User can either sort by title column or title row: (from low to high (a to z), vice versa)
Sort 'Critical Path Clk Period' from low to high

DC Analysis

Enter Number to Filter: [Enter filter word] [above ▾] [Filter] [Clear]

	OUTPUTS	rclk	OUTPUTS	rclk	OUTPUTS	rclk	OUTPUTS	rclk	INPUTS	wclk	INPUTS	wclk	INPUTS	wclk	INPUTS	wclk
Levels of Logic	1.000	7.000	3.000	7.000	3.000	7.000	3.000	7.000	1.000	5.000	1.000	4.000	1.000	4.000	1.000	4.000
Critical Path Length	0.108	0.543	0.308	0.543	0.308	0.543	0.308	0.543	0.238	0.946	0.238	0.846	0.238	0.846	0.238	0.846
Critical Path Slack	0.292	-0.066	0.092	-0.066	0.092	-0.066	0.092	-0.066	0.643	0.035	0.643	0.135	0.643	0.135	0.643	0.135
Critical Path Clk Period	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total Negative Slack	0.000	-0.106	0.000	-0.106	0.000	-0.106	0.000	-0.106	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
No. of Violating Paths	0.000	2.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Worst Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

[Show Report Number]
[Add More Report]
[Back to Raw]

Sort report1 'rclk' from low to high:

DC Analysis

Enter Number to Filter: [Enter filter word] [above ▾] [Filter] [Clear]

	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk
Critical Path Slack	0.643	0.292	-0.066	0.035	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135
Total Negative Slack	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000
Worst Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Critical Path Clk Period	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000
Critical Path Length	0.238	0.108	0.543	0.946	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846
No. of Violating Paths	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000
Levels of Logic	1.000	1.000	7.000	5.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000

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[Add More Report]
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Show the Report Name:

DC Analysis

Enter Number to Filter: [Enter filter word] [above ▾] [Filter] [Clear]

	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk
Report Name	Report1	Report1	Report1	Report1	Report2	Report2	Report2	Report2	Report3	Report3	Report3	Report3	Report4	Report4	Report4	Report4
Critical Path Slack	0.643	0.292	-0.066	0.035	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135
Total Negative Slack	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000
Worst Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Critical Path Clk Period	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000
Critical Path Length	0.238	0.108	0.543	0.946	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846
No. of Violating Paths	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000
Levels of Logic	1.000	1.000	7.000	5.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000

[Show Report Number]
[Add More Report]
[Back to Raw]

Or either hide it if want:

Enter Number to Filter: [Enter filter word] [above ▾] [Filter] [Clear]

	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk
Critical Path Slack	0.643	0.292	-0.066	0.035	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135
Total Negative Slack	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000
Worst Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Critical Path Clk Period	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000
Critical Path Length	0.238	0.108	0.543	0.946	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846
No. of Violating Paths	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000
Levels of Logic	1.000	1.000	7.000	5.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000

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If the color for the title row is worthless, I can remove it.

Highlight

Enter Number to Filter: 0   [below ▾] [Filter] [Clear]

	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk	INPUTS	OUTPUTS	rclk	wclk
Levels of Logic	1.000	1.000	7.000	5.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000	1.000	3.000	7.000	4.000
Critical Path Length	0.238	0.108	0.543	0.946	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846	0.238	0.308	0.543	0.846
Critical Path Slack	0.643	0.292	-0.066	0.035	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135	0.643	0.092	-0.066	0.135
Critical Path Clk Period	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000	1.000	0.500	0.500	1.000
Total Negative Slack	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000	0.000	0.000	-0.106	0.000
No. of Violating Paths	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	2.000	0.000
Worst Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Hold Violation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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The filter actually is highlighting. This is a mistake, will fix it later and also add the filter function later