

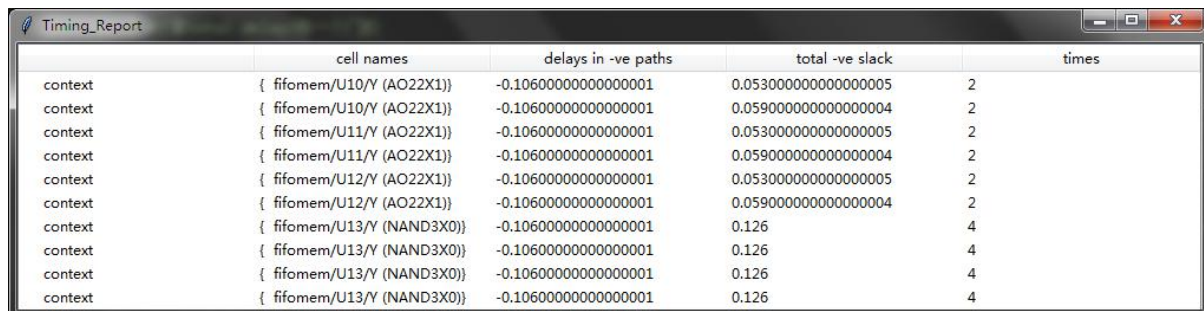
Data:3/19/2018-3/25/2018 Week 11

This week

1. Fix the number issue on last task

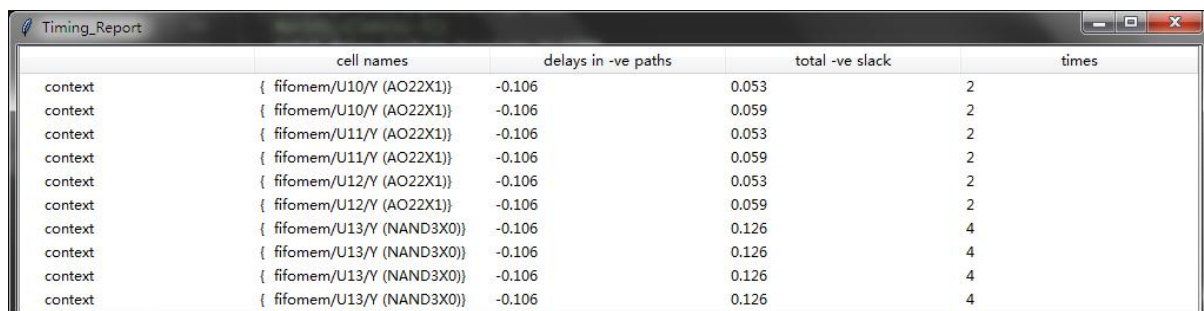
The method to fix this problem comes from Professor Schubert's suggestion. Get the first number from the A matrix and multiply it by 1000. Get the second number from the B matrix and multiply it by 1000. Add both and divide the result by 1000.

The result before fixed:



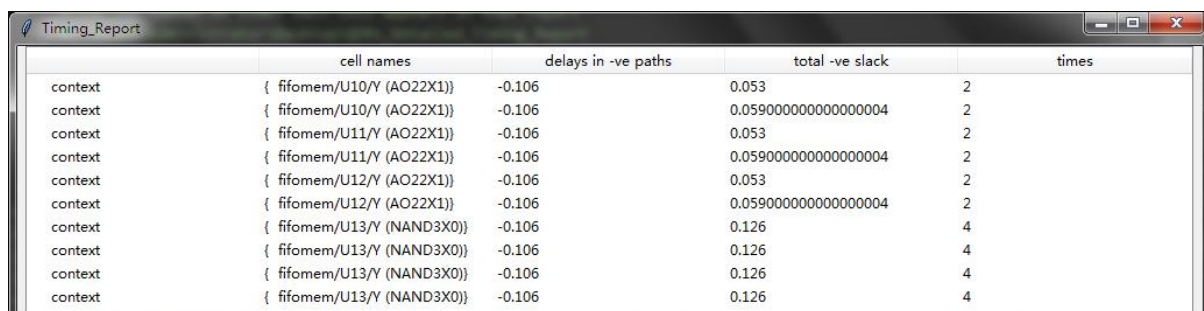
| context | cell names | delays in -ve paths | total -ve slack | times |
|---------|----------------------------|----------------------|----------------------|-------|
| context | { fifomem/U10/Y (AO22X1)} | -0.10600000000000001 | 0.053000000000000005 | 2 |
| context | { fifomem/U10/Y (AO22X1)} | -0.10600000000000001 | 0.059000000000000004 | 2 |
| context | { fifomem/U11/Y (AO22X1)} | -0.10600000000000001 | 0.053000000000000005 | 2 |
| context | { fifomem/U11/Y (AO22X1)} | -0.10600000000000001 | 0.059000000000000004 | 2 |
| context | { fifomem/U12/Y (AO22X1)} | -0.10600000000000001 | 0.053000000000000005 | 2 |
| context | { fifomem/U12/Y (AO22X1)} | -0.10600000000000001 | 0.059000000000000004 | 2 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.10600000000000001 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.10600000000000001 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.10600000000000001 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.10600000000000001 | 0.126 | 4 |

The result:



| context | cell names | delays in -ve paths | total -ve slack | times |
|---------|----------------------------|---------------------|-----------------|-------|
| context | { fifomem/U10/Y (AO22X1)} | -0.106 | 0.053 | 2 |
| context | { fifomem/U10/Y (AO22X1)} | -0.106 | 0.059 | 2 |
| context | { fifomem/U11/Y (AO22X1)} | -0.106 | 0.053 | 2 |
| context | { fifomem/U11/Y (AO22X1)} | -0.106 | 0.059 | 2 |
| context | { fifomem/U12/Y (AO22X1)} | -0.106 | 0.053 | 2 |
| context | { fifomem/U12/Y (AO22X1)} | -0.106 | 0.059 | 2 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |

And I found a tricky thing. A number times (1/1000) and a number do the division 1000 will lead different number in python. The picture below is the number times (1/1000). Some number has been fixed. However, there still be some number hasn't been fixed.



| context | cell names | delays in -ve paths | total -ve slack | times |
|---------|----------------------------|---------------------|----------------------|-------|
| context | { fifomem/U10/Y (AO22X1)} | -0.106 | 0.053 | 2 |
| context | { fifomem/U10/Y (AO22X1)} | -0.106 | 0.059000000000000004 | 2 |
| context | { fifomem/U11/Y (AO22X1)} | -0.106 | 0.053 | 2 |
| context | { fifomem/U11/Y (AO22X1)} | -0.106 | 0.059000000000000004 | 2 |
| context | { fifomem/U12/Y (AO22X1)} | -0.106 | 0.053 | 2 |
| context | { fifomem/U12/Y (AO22X1)} | -0.106 | 0.059000000000000004 | 2 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |
| context | { fifomem/U13/Y (NAND3X0)} | -0.106 | 0.126 | 4 |

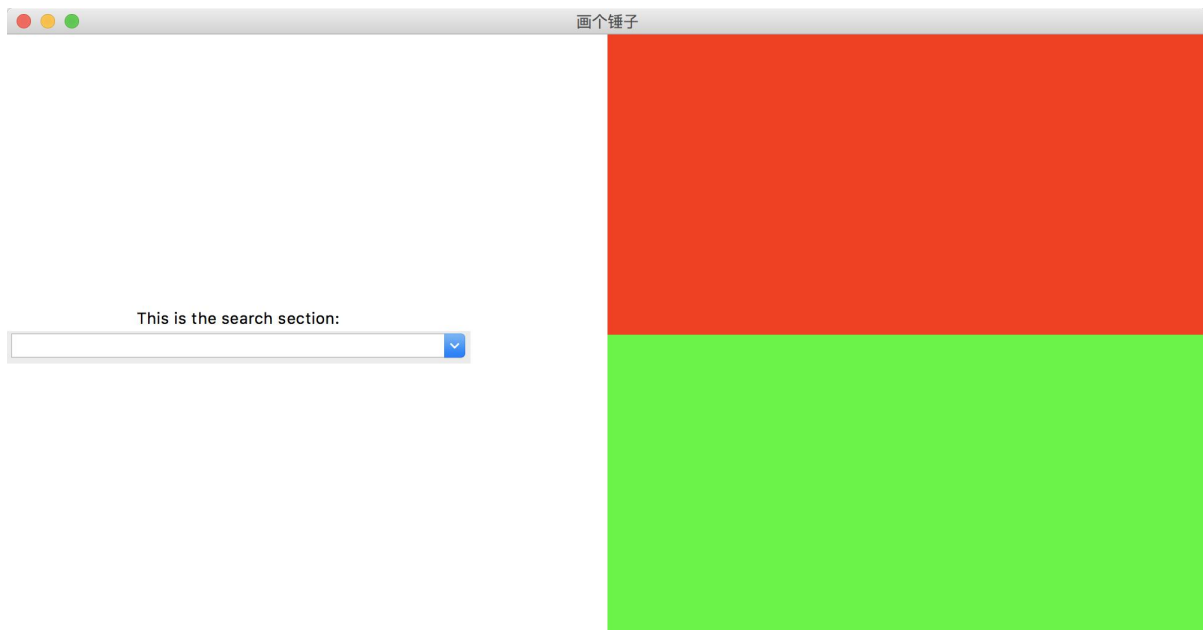
2. New task.

There be three section in the new task. I force on the third section GUI part this week.

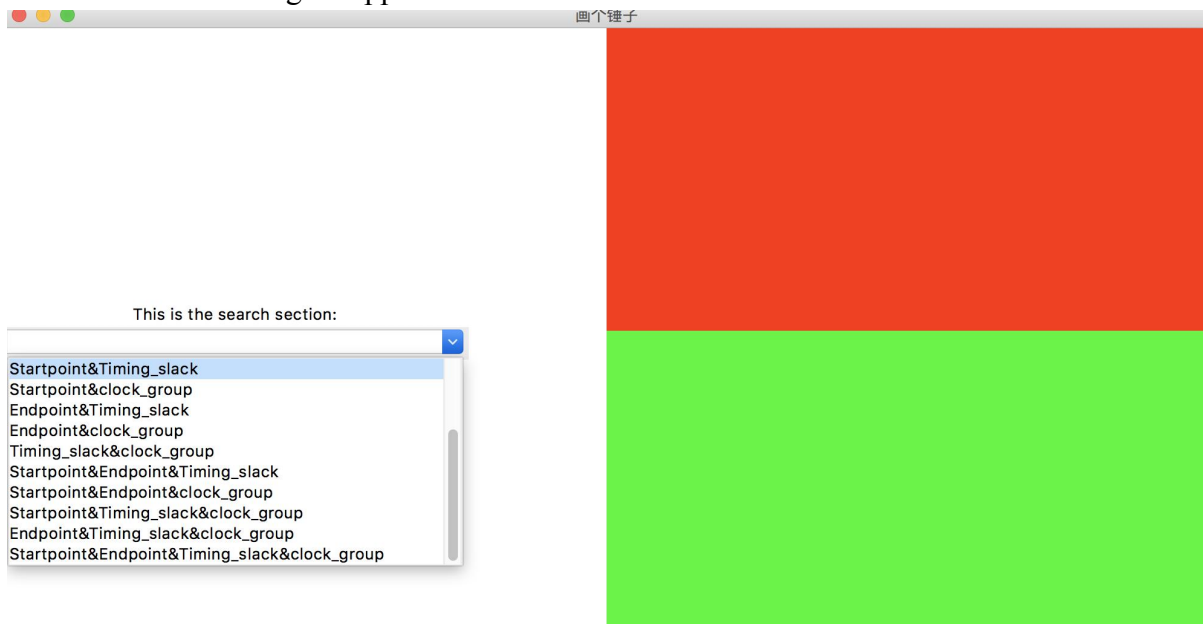
The red one is for first section.

The green one is for the second section.

First, in the third second section, the user could search what they want to search from the first section. There are four list we can get from the first section: Startpoint, Endpoint, Timing_slack and clock_group. In the combobox, the user can choose which lists do they want to search.



There are 15 cases might happen.



For example, if the user choose the last one Startpoint & Endpoint & Timing_slack & clock_group, there will be four more combobox show up.

The screenshot shows a window titled "画个锤子" (Draw a Hammer). On the left, there is a search section titled "This is the search section:". It contains five comboboxes stacked vertically. The first combobox is expanded, showing the text "Startpoint&Endpoint&Timing_slack&clock_group". Below it are four more comboboxes labeled "Startpoint", "Endpoint", "Timing_slack", and "clock_group", each with a dropdown arrow. At the bottom of the search section is a "Search" button. To the right of the search section is a large area divided into two horizontal rectangles: the top one is red and the bottom one is green.

In these part, the user can choose which item he/she want to search.

The item in this combobox is temporary. It is easy to change when we got data from the first section and the second section.

This screenshot shows the same window as the previous one, but the "clock_group" combobox is now expanded. It displays a list of three options: "3", "4", and "5". The other comboboxes and the "Search" button remain in the same state. The red and green rectangles on the right are also present.

The origin idea for the third section is show the data with listbox when I press the down button.

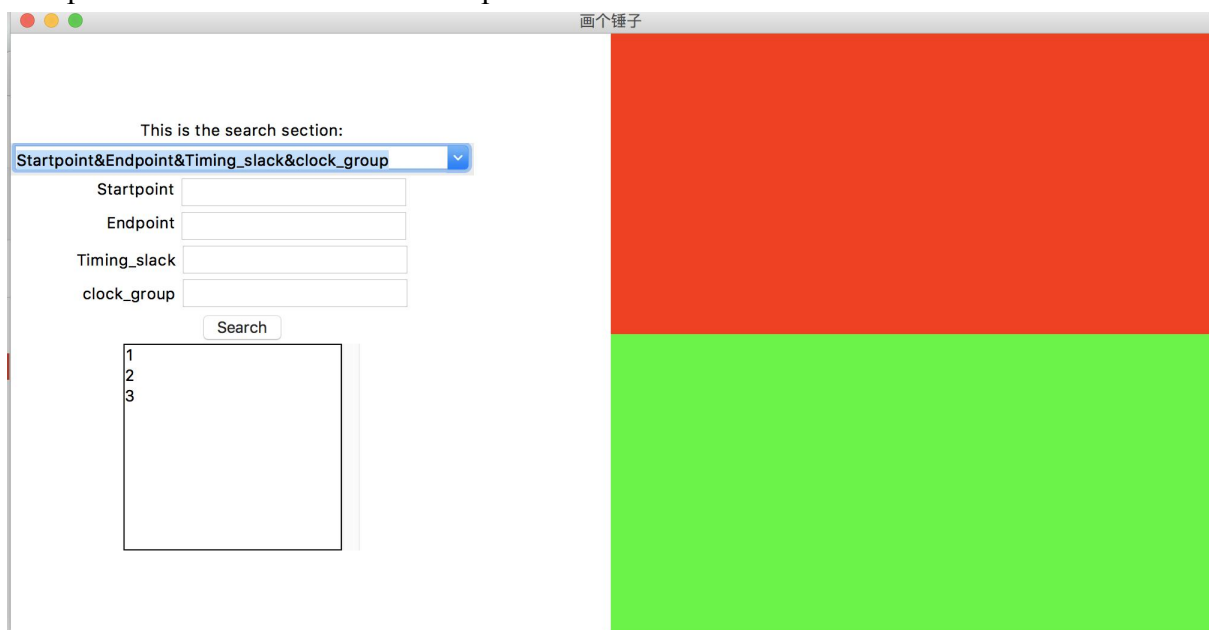
The beginning is same as before.

When the use choose Startpoint & Endpoint & Timing_slack & clock_group. There will be four entry and one listbox show up. The data in the lisbox will change when I press the down button.

This is the first idea I try. I found two issue which seem the challenge for me.

One is update the date in the listbox.

The second challenge is connect the position of cursor with entry. It means that if my cursor is in the Startpoint entry, then I press the down button. The listbox will update the data of Startpoint rather than the data of Endpoint.



Next week

Finish the new task

Improve the code---make it simpler

Improve the GUI--make it more beautiful.