Additional features:

1. Menu bar with ‘File’, ‘Help’, ‘Take a break’

Under ‘File’ menu, it has ‘Course profile’, ‘Statistics’, ‘Clear’, ‘Exit’

‘Course profile’: open the website of the course profile of CSSE7030

‘Statistics’: open a top level window to show the statistics of history data

Chose at least one checkbox of the question type, then press ‘Get’ button to get the table

Press ‘Clear history’ button to clear all the history

Press ‘Close’ button to close the top level window

‘Clear’: clear the queue (either clear the quick queue, long queue, or both queue) or history (clear all the history of the queue)

‘Exit’: quit and close the window

In ‘Help’ menu, it has 3 options: ‘Python visualization tool’, ‘Python documentation’, ‘An Introduction to Tkinter’, which it will open 3 websites respectively

‘Take a break’: play the game ‘Tower of Hanoi’

1. It would have a notification to show the average time for the current queue and brief user manual after a student successfully add into a queue. The notification window would close after a few seconds
2. The game ‘Tower of Hanoi’:

The game start with 3 disks on the left rod.

Player can change the number of disks from 1 to 8 by pressing the up and down button of the spinbox.

Moving a disk by click then move the mouse. If the disk moving to the invalid place, it would bounce back to the original place.

If all the disks move to the right rod, player get the notice of winning the game

‘New game’ button: start a new game with the same number of disks

‘Quit’ button: quit the game and close the window

Approach using to writing the code:

1. Import webbrowser
2. Import math
3. Import statistics
4. Import tkinter
5. Import time
6. Tower of Hanoi is also using MVC (model-view-controller) model

The big challenge for me to write the game tower of Hanoi is the part that I want the disk moves the specified place when release the mouse (bind the event to canvas)

When release the mouse to drop a disk, if the place is unavailable to move, the disk will bounce back to the original place, while the place is able to put down, the disk would bounce to the nearest rod