MATLAB Programming   NYCU   Fall 2022   Assignment#4   due 2022/12/25

In this assignment, your task is to create a GUI program for displaying a set of rectangles. A sample is shown here. Each rectangle is specified by four coordinates **(x1,y1,x2,y2)**.

● The user can add rectangles using the edit fields and the **Add** pushbutton.

● The list box lists all the rectangles in the format of "(x1,y1)-(x2,y2)".

● When a rectangle in the list box is selected, list its corner coordinates in the edit fields.

● When a rectangle in the list box is selected, highlight that rectangle in the plot using either a different color, a thicker line width, or both.

● When the user just adds a new rectangle, that rectangle is selected and highlighted.

● The user can change the selected rectangle using the edit boxes and the **Change** pushbutton.

● The user can delete the selected rectangle using the **Delete** pushbutton.

You need to maintain an internal data item to remember all the rectangles..
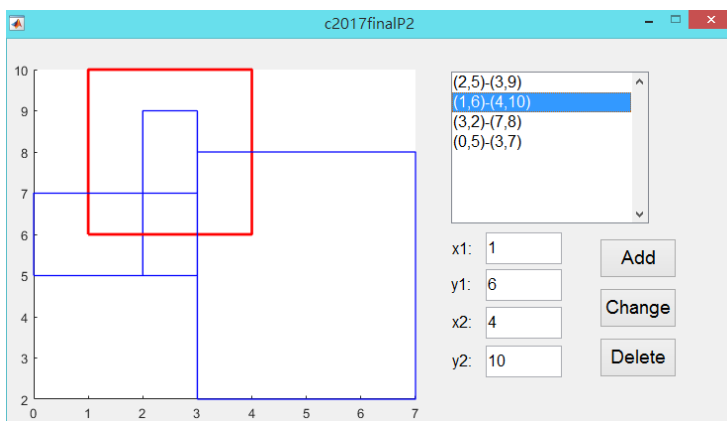
Submission: Submit your code through E3. Name your file **P4_######.mlapp**, where the **######** represents your student ID. There will be a three-day grace period after the due date, during which there will be a 10%/day deduction for your grade.

A "copy detection" will be applied to your submissions, and those found to have copied assignments will receive zero points for the assignment.

Your code should include sufficient comments. This will be part of the grade. Include your name and ID at the top of your code.

There will be demo session with the TAs (date/time to be announced later).