

THE UNIVERSITY OF MELBOURNE

ENGR30002 Fluid Mechanics

Workshop 07 – *Simulation*

Part A

patch is a built-in MATLAB function to plot one or more filled polygonal regions. For instance, `patch (X,Y,C)` plots filled regions using an user defined elements of X and Y as the coordinates. You have an option to determine colors to fill the regions. *Visit MathWorks Help Center and search 'Patch' for examples.*

Part B

Question 01

Create a rectangle and a triangle as shown in Figure 1 in a separate script.

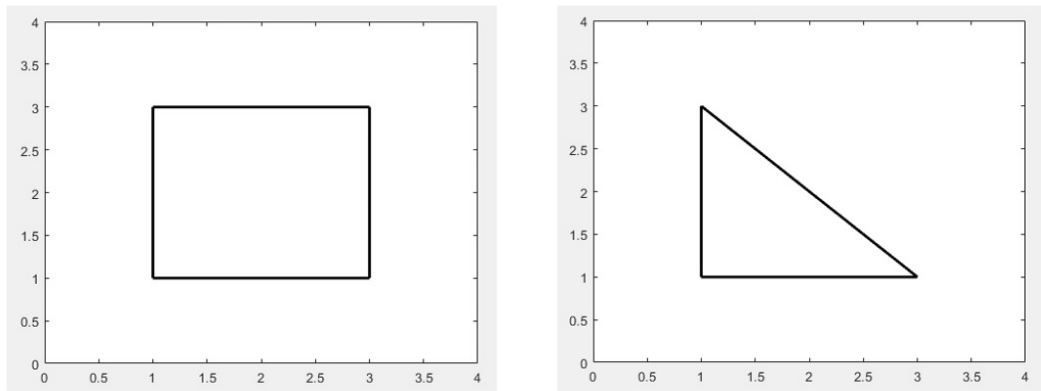


Figure 1: Rectangle and triangle

Question 02

Using the scripts in Question 01, you will make a simple simulation filling the rectangle and triangle as shown in Figure 2. Use **patch** function and apply an iteration method. You need to specify each line and then fill a region. Watch a tutor's demonstration video.

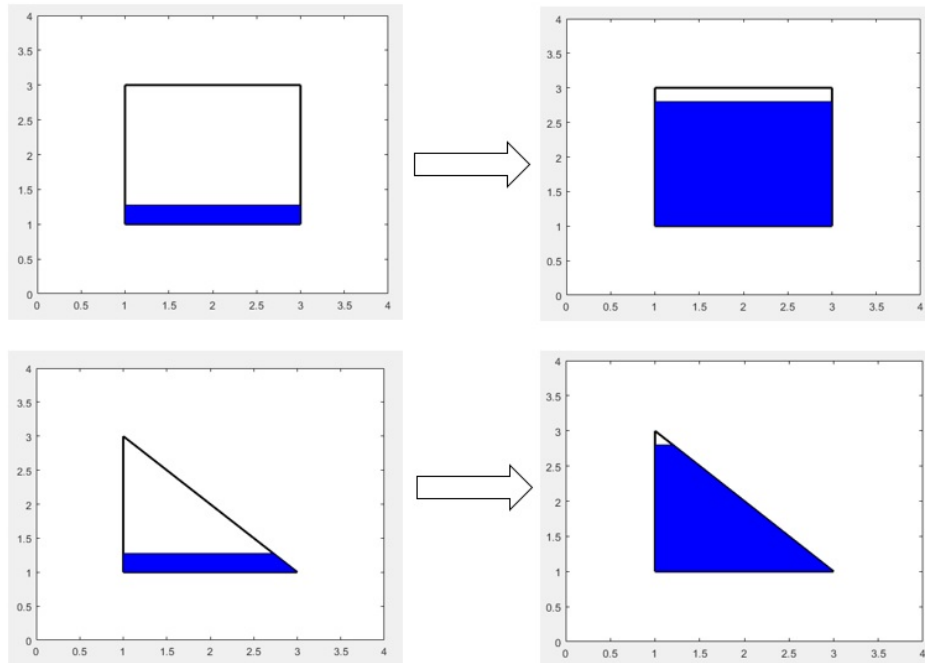


Figure 2: Rectangle and triangle filling

END OF WORKSHOP