1. A = , choose the first column to calculate determine.

det(A) = 1\*(-1)2\*det(A11) + 1\*(-1)3\*det(A21) + 1\*(-1)4\*det(A31)

=

=

=

=

=

=

=

=

If any two of x1, x2, x3 are equal, det(A) = 0. Under these conditions, A is singular.

1. A1= , A2 = , A3 =

det(A1) =

det(A2) =

det(A3) =

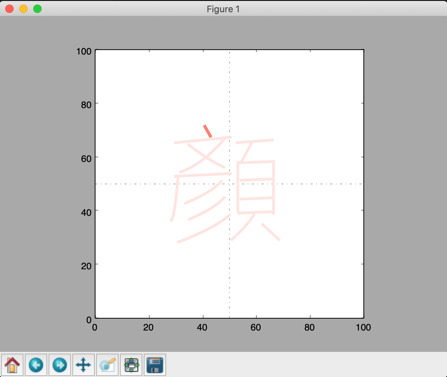
a =

a0 =

a1 =

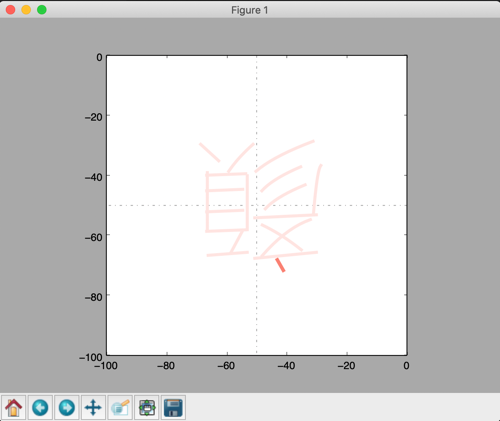
a2 =

1. Image

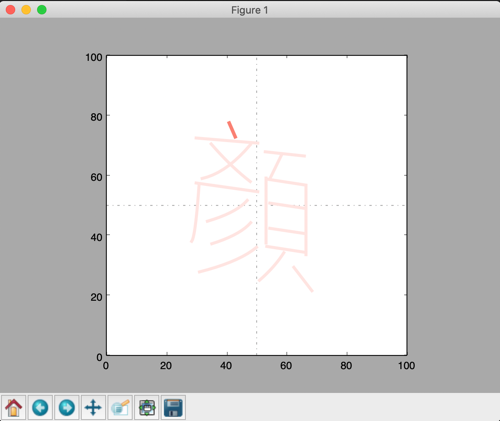


1. Transformation images :

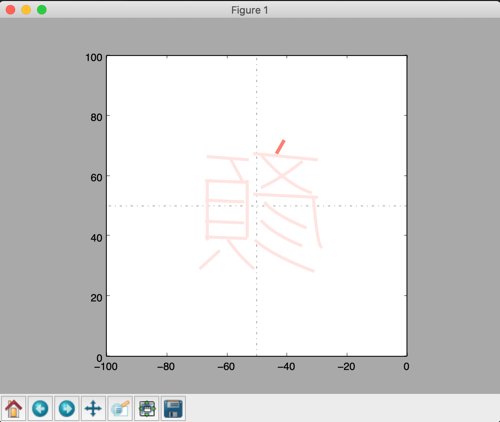
A = [[-1,0], [0,-1]], B = [[-1,0], [0,-1]] (B for middle adjusting line)



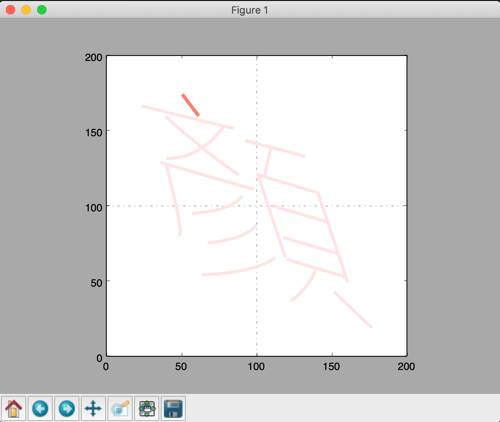
A = [[1,0], [-0.2,1.2]], B = [[1,0], [0,1]] (B for middle adjusting line)



A = [[-1,0], [0,1]], B = [[-1,0], [0,1]] (B for middle adjusting line)



A = [[3, -1], [-1, 3]], B = [[2,0], [0,2]] (B for middle adjusting line)



1. Motivation and process:

一開始認為要做「字」的創作時，讓我想到描字本的框線架構。因此我將圖的中央添加了兩條虛線仿作生字簿的分區，並將每一筆畫的顏色、寬度改變。然後為了要讓字的結構好看，我到網路上尋找我要的字於生字簿上的結構（如下附圖）。而讓我遭遇到最大困難的是中間那兩條虛線，因為在做linear transformation時，那兩條線也會跟著變動，但這樣與原本想做成生字本的概念背離，因此我另外新增了matrix B，去控制那兩條線的變化。