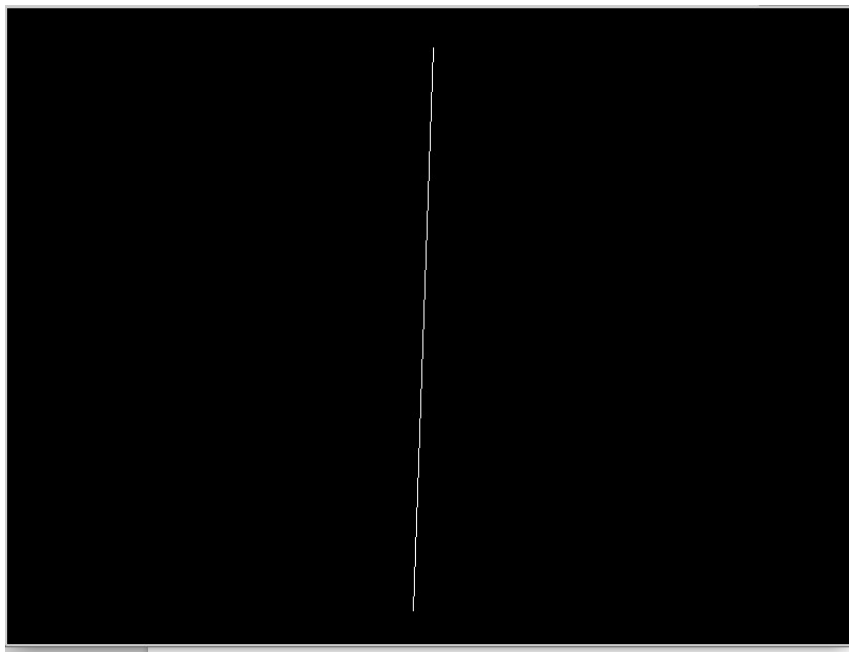
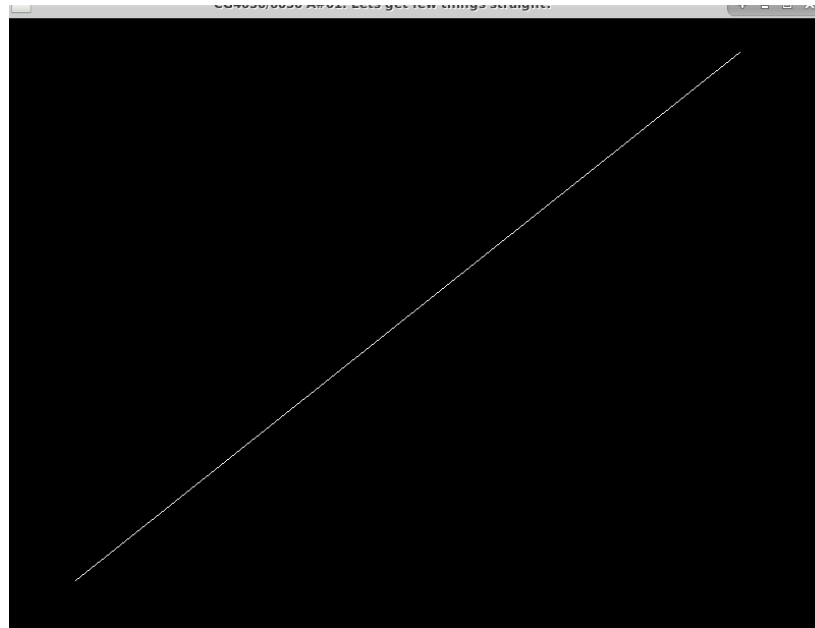


Assignment 1

A) Implement Bresenham's Algorithm for Drawing Line Segements

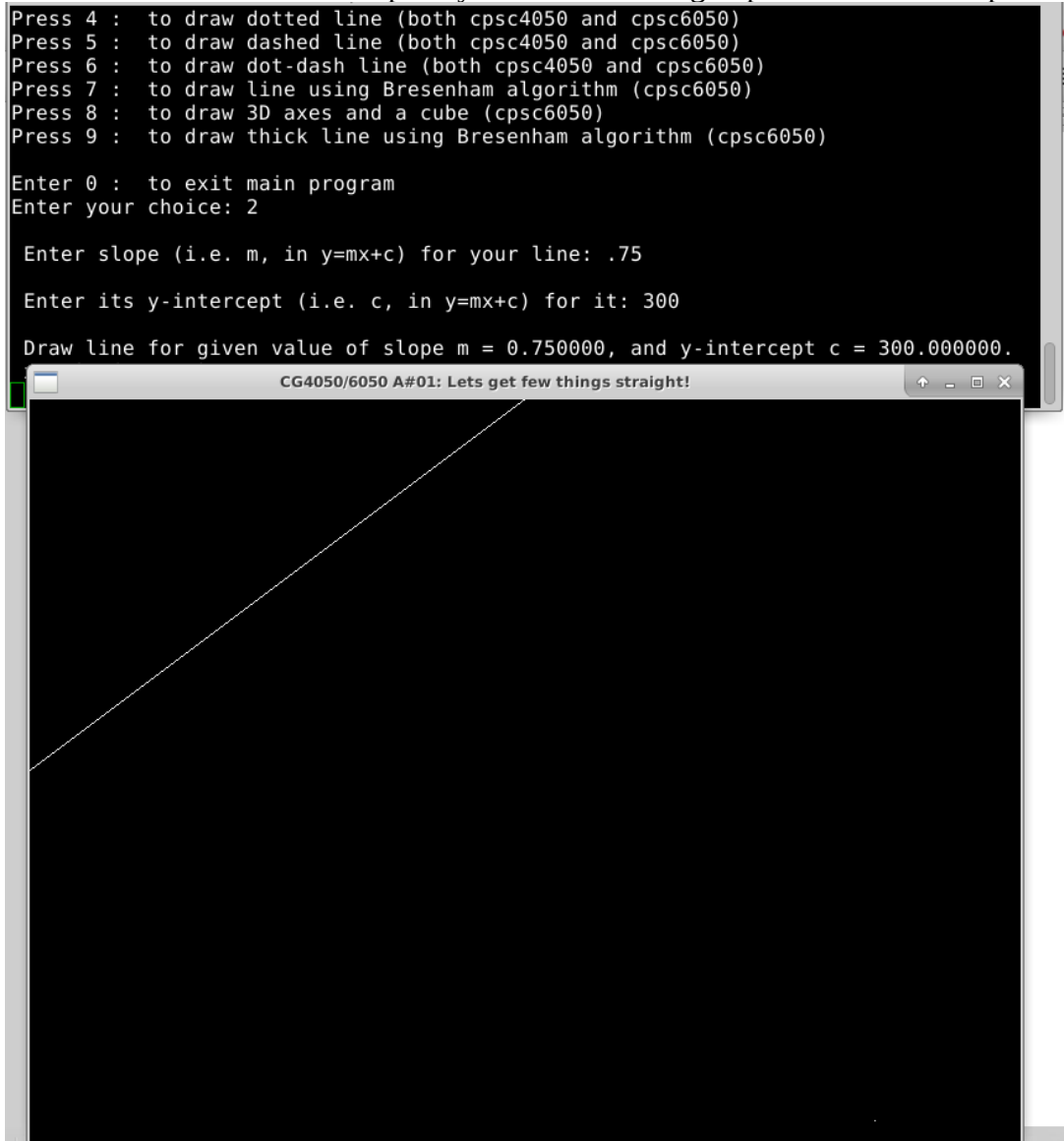


B) Implement a function to draw complete $y=mx+c$ lines using implementation from part A

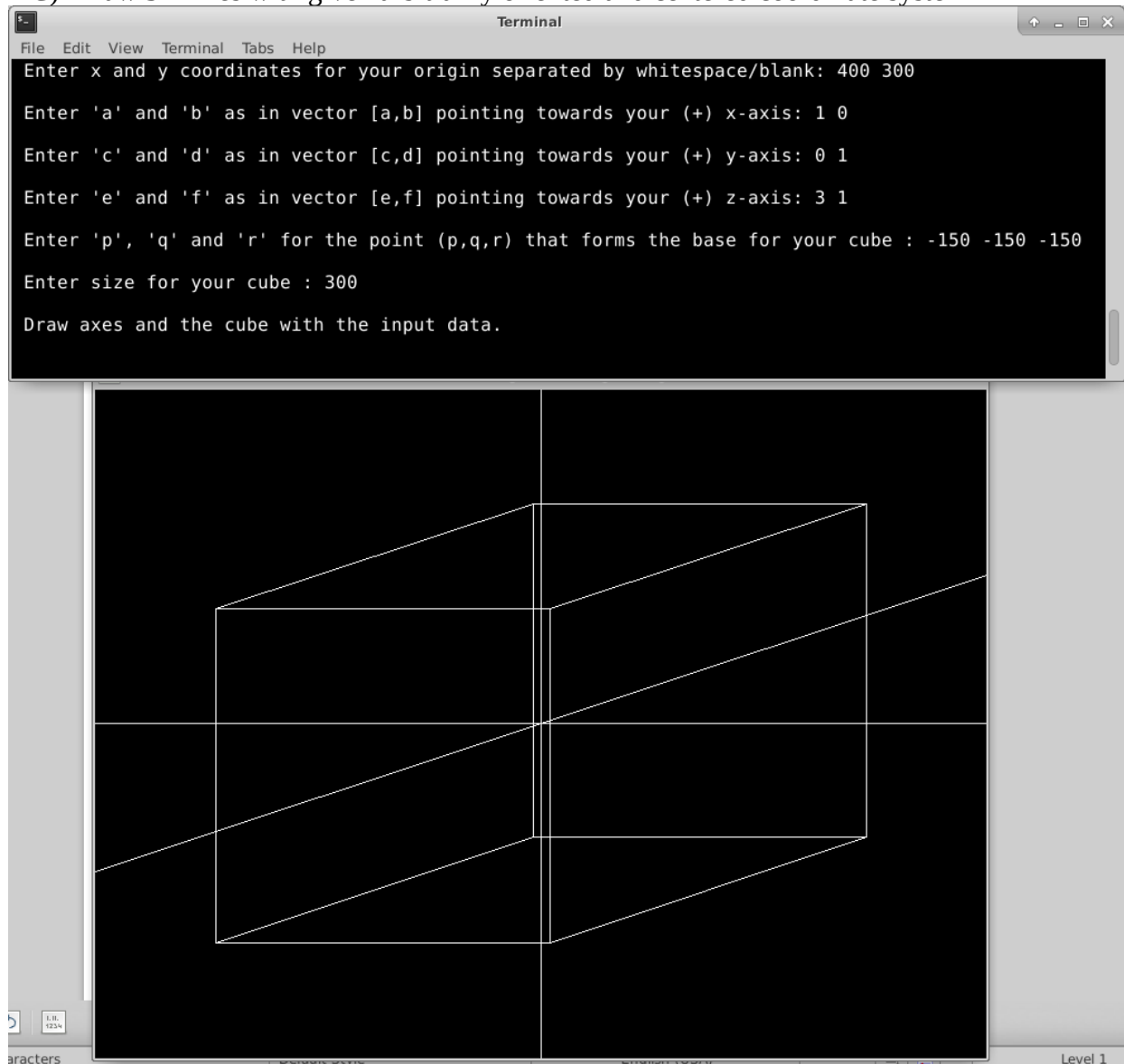
```
Press 4 : to draw dotted line (both cpsc4050 and cpsc6050)
Press 5 : to draw dashed line (both cpsc4050 and cpsc6050)
Press 6 : to draw dot-dash line (both cpsc4050 and cpsc6050)
Press 7 : to draw line using Bresenham algorithm (cpsc6050)
Press 8 : to draw 3D axes and a cube (cpsc6050)
Press 9 : to draw thick line using Bresenham algorithm (cpsc6050)

Enter 0 : to exit main program
Enter your choice: 2

Enter slope (i.e. m, in  $y=mx+c$ ) for your line: .75
Enter its y-intercept (i.e. c, in  $y=mx+c$ ) for it: 300
Draw line for given value of slope m = 0.750000, and y-intercept c = 300.000000.
```



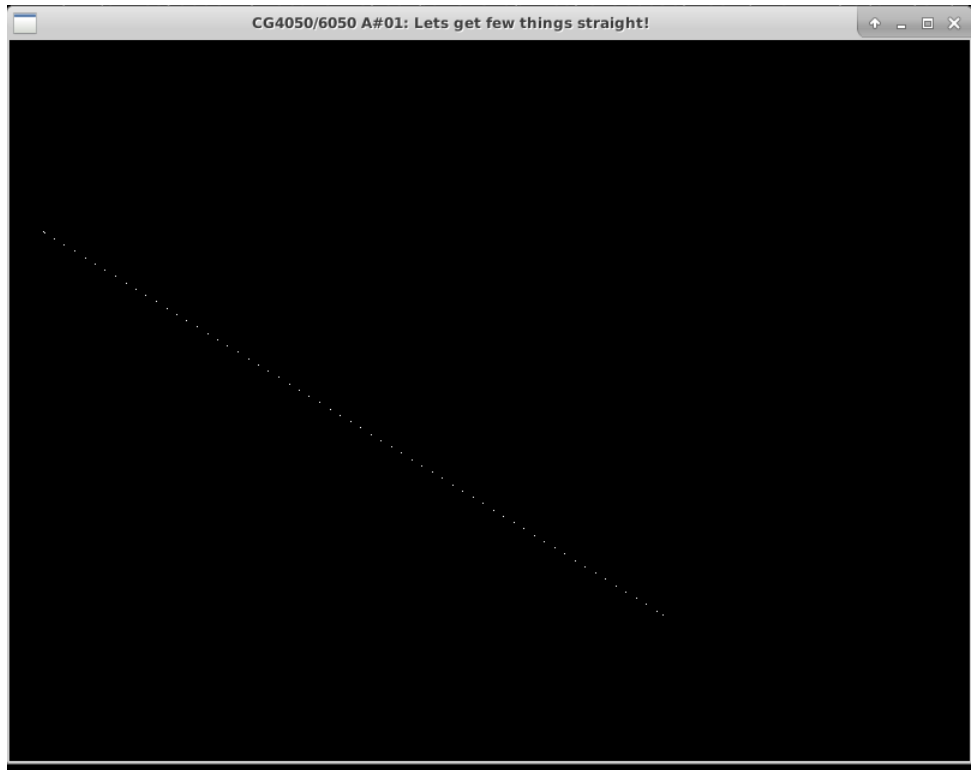
C) Draw 3D lines with given arbitrarily oriented and centered coordinate system



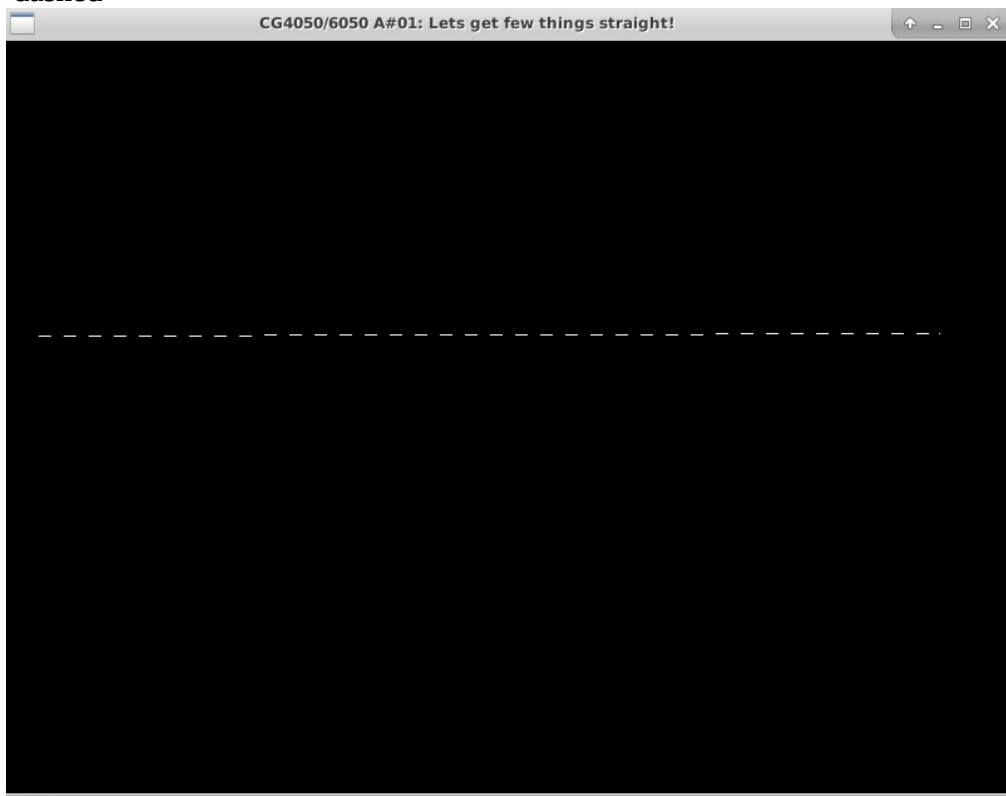
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D) Draw two of the stylized lines

i. dotted



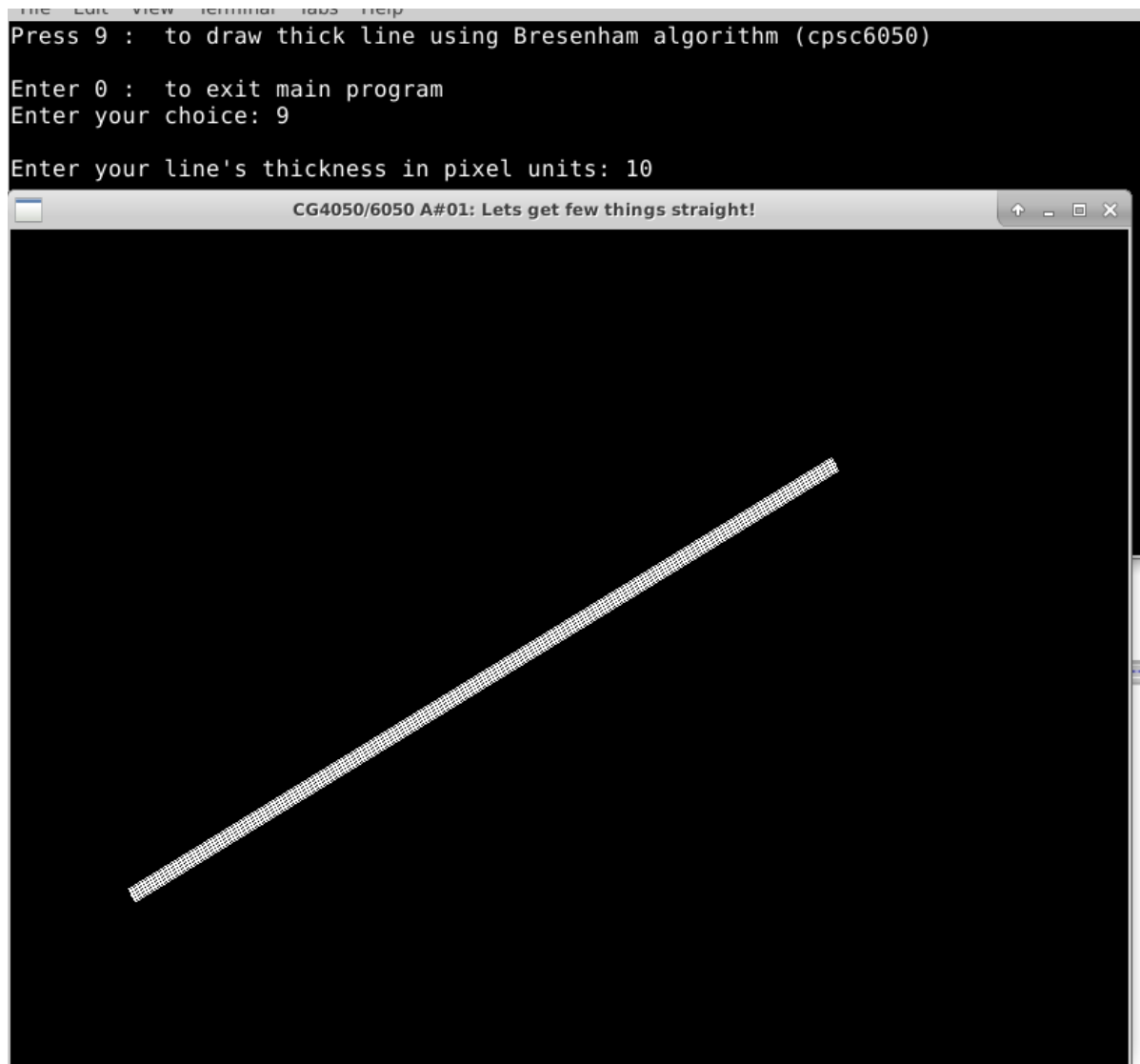
ii. dashed



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E) bonus

- i. Implement part A with arbitrary line thickness in pixels



- ii. Implement part D with arbitrary line thickness in pixels

