

Quiz 5 (100 pts)

Time Limit: 25 mins

Name: _____ AndrewID: _____

You can run code when completing this part of Quiz 5.

Time limit: 25 mins

Free Response 1: dotsAndLines (90 pts)

Write an animation such that:

- The app starts with a blank canvas (except for the title, which is in the starter code).
- When the mouse is pressed, a lightBlue dot of radius 20 is drawn centered on the mouse.
- As the mouse is dragged, a line is drawn from the center of the dot to the current mouse location. The line should be drawn above the dot.
- When the mouse is released, a purple dot of radius 20 is drawn centered at the mouse location.
 - The line is now permanently drawn between the centers of the lightBlue dot created at the press, and the purple dot created at the release.
 - The line should be drawn above both dots.
 - New dot-line pairs should be drawn above any previous ones they overlap.
- When an arrow key is held (up, down, left, right), all completed dot-line pairs on screen move 5 in that direction.
 - If both the left and right keys are held, the dot should not move horizontally. Similarly, if both the up and down keys are held, the dot should not move vertically.
 - If a dot-line pair is in the process of being created (the mouse is held down but not yet released), that pair does not move. Only the completed dot-line pairs move.

You may use any topics covered in class so far. You may not use sets, dictionaries, or recursion.

Write your answer below.