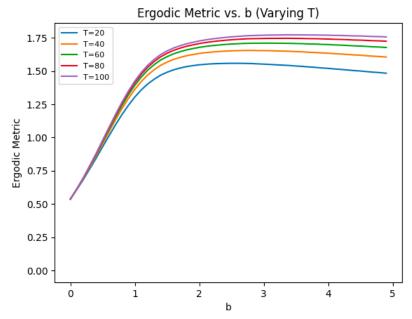
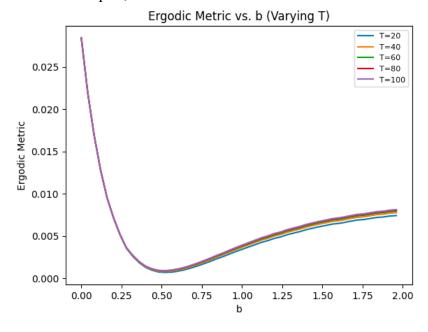
Problem 1

I ended up getting two results for the ergodic metric as a result of varying b and T. In this first plot, we see that the minimum ergodic metric occurs when b is 0.



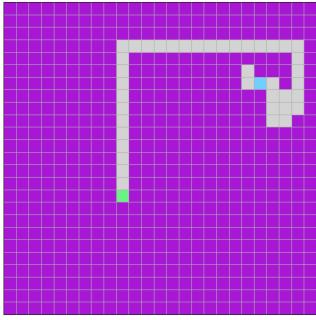
In the second plot, we notice that b reaches a minimum close to 0.5.



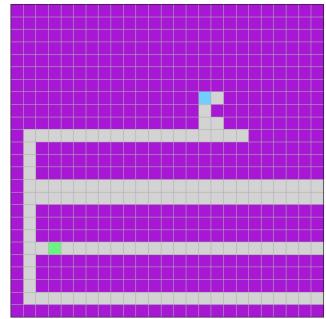
Problem 2

Below are 4 randomly generated locations for D and A. D is shown in blue, A is shown in a pale green and the path is drawn out in white.

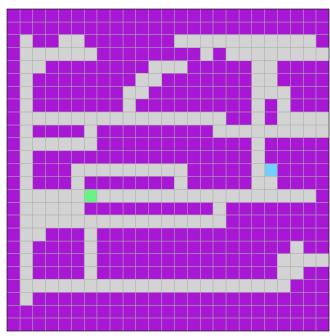
$$D = [20, 18], A = [9, 9]$$



$$D = [17, 15], A = [3, 5]$$



$$D = [20, 12], A = [6, 10]$$



D = [9, 5], A = [18, 16]

