

Q1

On black board

Q2

	Adversarial Ghost	Random Ghost
Minimax Pacman	Won 1/5 Avg.Score: 42.4	Won 3/5 Avg.Score: 66.7
Expectimax Pacman	Won 0/5 Avg.Score: -22.0	Won 2/5 Avg.Score: 48.4

Q3

- 1) random ghost vs. minimax pacman:

The position of random ghost is distributed randomly and have no relationship with the position. And when I run this program the ghost won't chase the Pacman.

The movement of the minimax Pacman seems more intelligent, but in fact sometimes it will. trapped somewhere.

- 2) random ghost vs. expectimax pacman:

though the rate of win is not low, but in face both of the ghost and the pacman are distribution randomly and not smart enough.

- 3) Adversarial Ghost vs. minimax pacman:

Adversarial Ghost and minimax pacman are all smart, and pacman is not easy to be chased.

- 4) Adversarial Ghost vs. expectimax pacman:

The Ghost id smart but he pacman is stupid, so there is a low probility to win. The average. score and win rate is obviously low

In case3 and case4(Adversarial Ghost vs. minimax pacman ; Adversarial Ghost vs. Expectimax. pacman)The Pacman agent is implementing the correct assumption of the ghosts behavior in all cases.

Q4

Because the movement of the ghost is related to each other and one movement will change the gameState, so they look like cooperating with each other.

