## **Evaluation**

## Success:

- Program is able to successfully run and load the maze and images.
- Program is able to have different Pac-Man lives so when Pac-Man hits a ghost, it still has two more lives to try and collect all the dots around the maze.
- The program is also easy to use with just the arrow keys for movement and the 's' button for starting the game on the introduction screen.

## **Future Improvements:**

This program took a decent amount of time to make but it was interesting learning about all the different aspects that go into a Pac-Man game. Though I finished my code and everything works, there is still a lot that can be added and improved in the game and code.

To start off with, though I attempted to make the ghost movement random, the ghosts still don't move how they normally do in the original game. The ghosts are supposed to follow Pac-Man when they get close to Pac-Man but mine just move in supposedly random directions. I wasn't sure how to implement a method or a way to make them move that way, and thus left it as is, but this can definitely be figured out and implemented with enough time.

Another improvement that can be put in is the power pellets or the power-ups for Pac-Man. In the original game, Pac-Man is able to eat the ghosts to gain bonus points if he eats the power pellet. Making the collision detection switch between the ghosts and Pac-Man was something I was unsure of how to do. This doesn't potentially affect the gameplay but it's an optional modification that is also fun for the player.

This program allows anyone to download and play the game without the use of an Adobe Flash Player, which I found was needed for almost all the games that I found online. The only setback is that the player needs to have java runtime environment.