# TODO:

1. Add cherry for first level and have it appear after 70 dots have been cleared and keep there for approx. 10sec.
2. Have cherry appear after 170 dots have been cleared and keep there for approx. 10sec.
3. Add collision box to fruit and score appropriately when pac-man eats fruit.
4. Make sure that fruit timer pauses when pac-man eats ghost.
5. Test that correct fruit shows up with correct scoring for all levels.
6. Add title screen similar to pac-man namco version bought on steam. For now, leave out the play through.
7. Add free life after 10000 pts (check to make sure) and add free life sound.
8. Make high score persistent.
9. Polish game to make sure major bugs are squashed and difficulty tweaked depending on level.
10. Put volume back to 100%.
11. ========================== Possible Extra Features ================================
12. Add intermissions that happen at various level.
13. Have ghost pause inside box when pac-man eats ghost.

28 x 31 grid (going by pellets but also including outside walls).

Player should move (slide) .32 to reach next square up or down, left or right.

For reference:

<https://www.youtube.com/watch?v=dScq4P5gn4A>

Scoring Reference:

<http://pacman.wikia.com/wiki/Pac-Man_(game)>

Ghost behavior:

http://gameinternals.com/post/2072558330/understanding-pac-man-ghost-behavior

1. Scatter for 7 seconds, then Chase for 20 seconds.
2. Scatter for 7 seconds, then Chase for 20 seconds.
3. Scatter for 5 seconds, then Chase for 20 seconds.
4. Scatter for 5 seconds, then switch to Chase mode permanently.

Ghost points when eaten: 200, 400, 800, 1600

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| http://pacmanmuseum.com/history/_picts/ICONS/cherry.gif | The cherry is worth 100 points. It appears during the first level of game play |
| http://pacmanmuseum.com/history/_picts/ICONS/strawberry.gif | The strawberry is worth 300 points. It appears during the second level of game play |
| http://pacmanmuseum.com/history/_picts/ICONS/orange.gif | The orange is worth 500 points. It appears during the third and fourth level of game play |
| http://pacmanmuseum.com/history/_picts/ICONS/apple.gif | The apple is worth 700 points. It appears during the fifth and sixth level of game play |
| http://pacmanmuseum.com/history/_picts/ICONS/pineapple.gif | The pineapple is worth 1,000 points. It appears during the seventh and eighth level of game play |
| http://pacmanmuseum.com/history/_picts/ICONS/spaceship.gif | The Galaxian spaceship is worth 2,000 points. It appears during the ninth and tenth level of game play |
| http://pacmanmuseum.com/history/_picts/ICONS/bell.gif | The bell is worth 3,000 points. It appears during the eleventh and twelfth level of game play |
| http://pacmanmuseum.com/history/_picts/ICONS/key.gif | The key is worth 5,000 points. It appears during the thirdteenth and all subsequent levels of game play |

* Fruit appears twice each round
* First one appears after 70 dots have been cleared.
* The second one appears after 170 dots have been cleared.
* Time fruit stays is about 9.75 sec.
* If a bonus fruit appears and Pac-Man eats a ghost, the timer that controls how long the fruit stays onscreen halts with everything else.