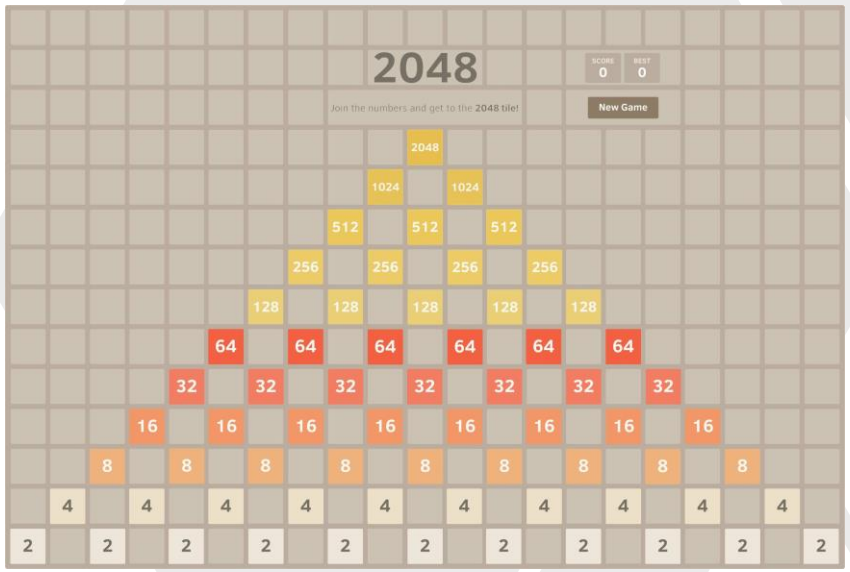

CS5001 final project

Mozhi Shen

Game 2048

Version 1:

- Only used random, no package or reference outside CS 5001, 100% self working.
- Used most of the tools we learned during class.
- Pros:
  - It works!
- Cons:
  - Forget to use Class to store data.
  - A small bug: hard to judge when the game end.
  - No Graphic display

Vision 2:

Try pygame. to create a graphic-version.

Go over 2 pygame tutorial articles, which created two simple games with animation.

- https://realpython.com/pygame-a-primer/
- https://www.edureka.co/blog/snake-game-with-pygame/

I want to have the blocks move!

Failed, need more time.

Need to trace the move of each block, determine where they go or end.

Vision 3:

No animation, Main goal first!.

Go over some tutorial on YouTube!

Class was created!

Thoughts/Tips:

YouTube is Great!

- You can see how the program is organized
- You can see the intermediate work.

Pick up colors:

- https://imagecolorpicker.com/en

Deep copy of a lists would be useful, sometimes:

- Import copy
- A = copy.deepcopy(B)

Thoughts/Tips

- If you have “left”, no need to create “right”, “up” and “down”.
  - A = left(A)
  - Right: reverse your list, do left(A), and reverse back.
  - Up :transpose your matrix, do left(A), and transpose back.
  - Down: Right + Up.

- For key in “LRUD”:
- if key in “UD”:
- matrix.transpose()
- if key in “RD”:
- matrix.back()
- **matrix.left()**
- if key in “UD”:
- matrix.transpose()
- if key in “RD”:
- matrix.back()