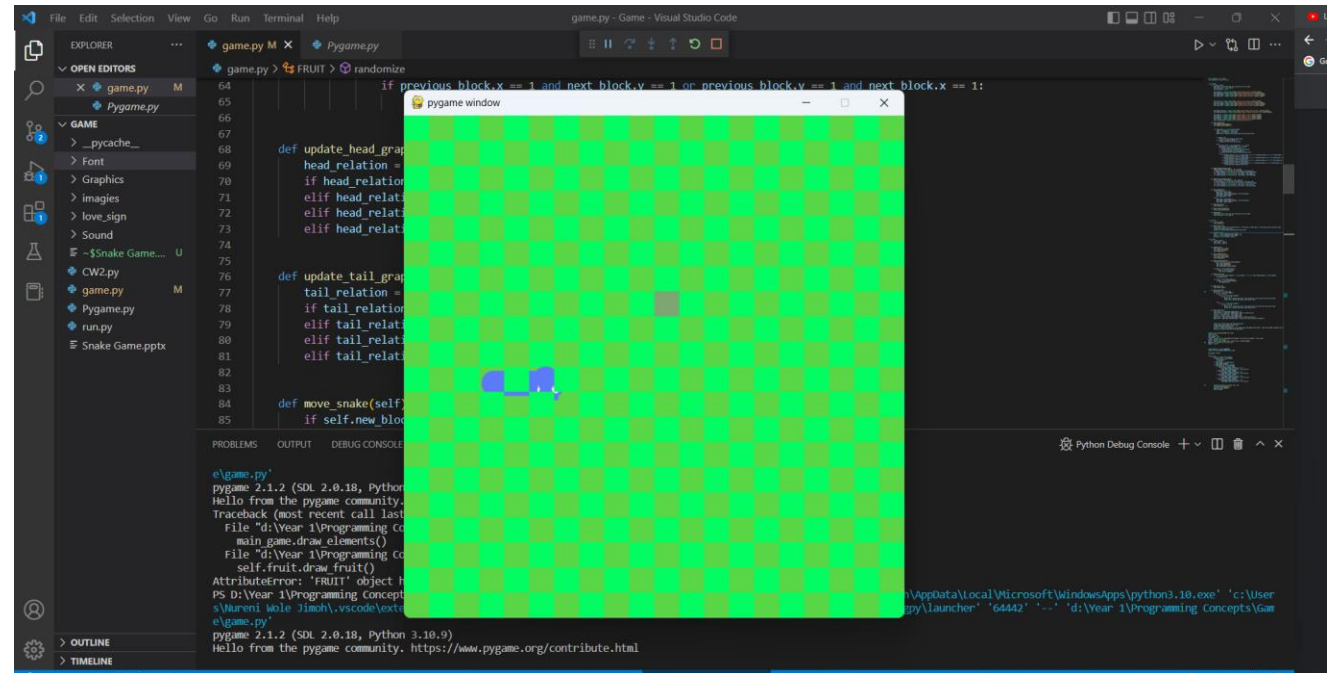


# Snake Game

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# Introduction to the game

- The game is going to be about a snake that is going to eat the food in order for it to keep growing and this will continue until you either eat your self or the wall.
- This is what the official game looks like.



```

3
4
5 class SNAKE:
6     def __init__(self):
7         self.body = [Vector2(0, 0)]
8         self.direction = 'right'
9         self.new_block = False

```

## Overview of classes

- In the Snake class the Main class the Fruit class.
- The reason why I used the Snake class is that that is where I put the body of the snake, the direction of where the snake was going, and add new blocks to make the snake keep growing.
- I used the fruit class to make the fruit it will eat.
- The main is where I put all the actions the game will take.
- The Vector2D made it easier for me to make the positions for my snake and others.

```

class FRUIT:
    def __init__(self):
        self.randomize()

    def draw_fruit(self):
        fruit_rect = pygame.Rect(int(self.x * 100), int(self.y * 100), 100, 100)
        screen.blit(block, fruit_rect)
        pygame.draw.rect(screen, (128, 0, 128), fruit_rect)

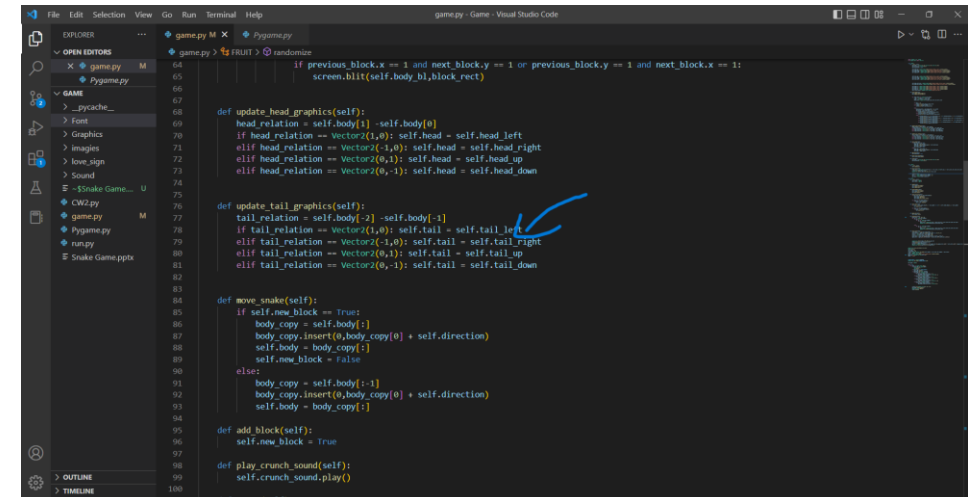
    def randomize(self):
        self.x = random.randint(0, 10)
        self.y = random.randint(0, 10)
        self.pos = Vector2(self.x, self.y)

class MAIN:
    def __init__(self):

```

# Development of game

- In this game I met with multiple difficulties:
- One of them was when I was trying to add more blocks to the snake to make it grow longer, I missing a piece of code in the def check\_collision(self):. It was the self.snake.add\_blocks(). That was all I needed the change.
- Another trouble that I came up with is the 'SNAKE has no object attribute 'tail.
- I also had trouble in making the grass the snake was going to walk on the background to make the snake more visible.
- The way I solved this was I moved the the self.draw\_grass() to the top to make it in the back ground.
- `def draw_elements(self):`
- `self.draw_grass()`
- `self.fruit.draw_fruit()`
- `self.snake.draw_snake()`
- `self.draw_score()`



# What I learned and what I can improve.

- What I learned is the use of vectors, the def, the ifs statements, the elif, and the else statements.
- The things that I can improve on is that I could try adding some more in-depth code into my game and making it more visual and detailed like adding multiple foods of different kinds, add multiple lives and a timer to add to that you can get the food quicker.

# GitHub link

- <https://github.com/BossUth/CO452-CW2-Game.git>