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import random

class SnakeGame:
    def __init__(self, width=20, height=20):
        self.width = width
        self.height = height
        self.reset()

    def reset(self):
        self.snake = [(self.width // 2, self.height // 2)]
        self.direction = (0, -1) # Start moving up
        self.spawn_food()
        self.score = 0
        self.game_over = False

    def spawn_food(self):
        while True:
            self.food = (random.randint(0, self.width - 1), random.randint(0,
self.height - 1))
            if self.food not in self.snake:
                break

    def change_direction(self, new_direction):
        # Prevent the snake from reversing
        opposite = (-self.direction[0], -self.direction[1])
        if new_direction != opposite:
            self.direction = new_direction

    def step(self):
        if self.game_over:
            return

        head_x, head_y = self.snake[0]
        dx, dy = self.direction
        new_head = (head_x + dx, head_y + dy)

        # Check collisions

```