

Snake Game part 3

Step 3: Add Key Controls

Now, let's add the ability to control the snake's movements with the arrow keys. We don't want to change the snake's speed, just its direction. There are a few ways to do this. We will create a new method that changes the snake's direction.

```
void direction(int x, int y) {
    xSpeed = x * gridSize;
    ySpeed = y * gridSize;
}
```

The `direction()` method is designed to take a number (1, -1, or 0) for the speed. It will then multiply this by the `gridSize` to move the snake one grid block at a time. For example, (1, 0) will move to the right. (-1, 0) will move to the left. With this method, we can change our grid size later, but the snake will still move one unit at a time across the grid.

Then, we will use the `keyPressed()` method with `if else` statements, to control the direction with the arrow keys.

Add this method to the end of your code .

```
void keyPressed() {
    if (keyCode == UP) {
        direction(0, -1);
    } else if (keyCode == DOWN) {
        direction(0, 1);
    } else if (keyCode == RIGHT) {
        direction(1, 0);
    } else if (keyCode == LEFT) {
        direction(-1, 0);
    }
}
```

When an arrow key is pressed, it will call the `direction()` method, with the correct values to change the snake's direction. In this game, once you start you can't stop.

Challenges

1. Set up the ability to control the snake with the 'a', 'w', 's', and 'd' keys, or other keys of your choice.

