```
1: // Copyright 2023 Thomas O'Connor
 2: #include <SFML/Graphics.hpp>
 4: using sf::Keyboard;
 5:
 6: int main() {
 7:
        // Create the main window
        sf::RenderWindow window(sf::VideoMode(1024, 1024), "Man");
 8:
 9:
        window.setFramerateLimit(120);
10:
11:
        // Load a sprite to display
12:
        sf::Texture textureBase;
        if (!textureBase.loadFromFile("sprite.png"))
13:
            return EXIT_FAILURE;
14:
15:
        sf::Sprite sprite(textureBase);
16:
        sprite.setPosition(200, 200);
17:
        sprite.setScale(1, 1);
18:
19:
        // Load a circle to display
20:
        sf::CircleShape shape(100.f);
21:
        shape.setFillColor(sf::Color::Green);
22:
23:
        // Declare offset variables
24:
        int xOffset = 0, yOffset = 0;
25:
26:
       // Start the game loop
27:
        while (window.isOpen()) {
28:
            // Process events
29:
            sf::Event event;
30:
            while (window.pollEvent(event)) {
                // Close window: exit
31:
32:
                if (event.type == sf::Event::Closed)
33:
                    window.close();
34:
35:
            // Clear screen
36:
            window.clear();
37:
            // Process keystrokes
            if (Keyboard::isKeyPressed(Keyboard::Right)) xOffset = 1;
38:
            if (Keyboard::isKeyPressed(Keyboard::Left)) xOffset = -1;
39:
            if (Keyboard::isKeyPressed(Keyboard::Up)) yOffset = -1;
40:
            if (Keyboard::isKeyPressed(Keyboard::Down)) yOffset = 1;
41:
42:
43:
            if (Keyboard::isKeyPressed(Keyboard::Equal))
44:
                sprite.scale(1.05, 1.05);
45:
            if (Keyboard::isKeyPressed(Keyboard::Hyphen))
46:
                sprite.scale(0.95, 0.95);
47:
48:
            // Offset the sprite
49:
            sprite.move(xOffset, yOffset);
50:
51:
            // Draw the sprite
52:
            window.draw(sprite);
53:
            window.draw(shape);
54:
55:
            // Reset Offset values
56:
            xOffset = 0; yOffset = 0;
57:
58:
            // Update the window
59:
            window.display();
60:
        }
61:
        return EXIT_SUCCESS;
62: }
```