```
     1: #include "sierpinski.hpp"
     2: #include <SFML/Window.hpp>
     3: #include <SFML/System.hpp>
     4: #include <iostream>
     5: #include <cmath>
     6:
     7: int main(int argc, char* argv[])
     8: {
     9:     /*
    10:     if (argc < 3 || argc > 4)
    11:     {
    12:         std::cout << "Sierpinski [recursion-depth] [side-length]" << std::en
dl;
    13:         return -1;
    14:     }
    15:
    16:     int depth = atoi(argv[1]);
    17:     int side = atoi(argv[2]);
    18:      */
    19:
    20:     int depth;
    21:     int side;
    22:
    23:     std::cout << "Enter depth: ";
    24:     std::cin >> depth;
    25:     std::cout << "Enter side: ";
    26:     std::cin >> side;
    27:
    28:     if (argc < 3 || argc > 4)
    29:     {
    30:         std::cout << "Sierpinski [side-length] [recursion-depth]" << std::en
dl;
    31:         return -1;
    32:     }
    33:
    34:     std::cout << "Depth: " << depth << std::endl;
    35:     std::cout << "Side: " << side << std::endl;
    36:
    37:     if (depth < 0)
    38:     {
    39:         std::cout << "Depth should be greater than 0" << std::endl;
    40:     }
    41:
    42:     Sierpinski obj(side, depth);
    43:
    44:
    45:     int window_height = (int)(.5*sqrt(3.)*(float)side);
    46:
    47:     sf::RenderWindow window(sf::VideoMode(side, window_height), "Sierpinski"
);
    48:
    49:     window.setFramerateLimit(1);
    50:
    51:     while(window.isOpen())
    52:     {
    53:         sf::Event event;
    54:         while(window.pollEvent(event))
    55:         {
    56:             if(event.type == sf::Event::Closed)
    57:             {
    58:                 window.close();
```

```
59:             }
60:         }
61:         window.clear();
62:         window.draw(obj);
63:         window.display();
64:     }
65:
66:     return 0;
67: }
```