```
 1: /**
 2: * main.cpp - as a base to run the program
 3: *
 4: * Date 2/14/22 - 2/22/22
 5: *
 6: * Created by: Anson Cheang
 7: *
 8: */
 9:
10: /*#include <SFML/System.hpp>
11: #include <SFML/Window.hpp>
12: #include <SFML/Graphics.hpp>*/
13: #include "CelestialBody.h"
14: #include "Universe.h"
15: #include <iostream>
16: #include <cstdlib>
17:
18: using namespace std;
19:
20: int main(int argc, char* argv[])
21: {
22:     double time = atoi(argv[1]);
23:     double seconds = 0;
24:         sf::RenderWindow window(sf::VideoMode(700, 700), "Input");
25:
26:         window.setVerticalSyncEnabled(true);
27:         window.setFramerateLimit(15);
28:
29:     sf::Image image;
30:     if(!image.loadFromFile("starfield.jpg"))
31:     {
32:         return -1;
33:     }
34:     sf::Texture texture;
35:     texture.loadFromImage(image);
36:     sf::Sprite sprite;
37:     sprite.setTexture(texture);
38:     sf::Vector2u size = image.getSize();
39:     sprite.setScale((1+700/size.x),(1+700/size.y));
40:
41:     int amount;
42:
43:     cin >> amount;
44:
45:     Universe space(amount);
46:
47:     while (window.isOpen())
48:         {
49:                 sf::Event event;
50:                 while (window.pollEvent(event))
51:                 {
52:                         if (event.type == sf::Event::Closed)
53:             {
54:                                 window.close();
55:             }
56:                 }
57:
58:                 window.clear();
59:         window.draw(sprite);
60:         if(seconds <= time)
61:         {
62:             space.step(atoi(argv[2]));
63:             seconds += atoi(argv[2]);
64:         }
65:         window.draw(space);
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    66:                     window.display();
    67:                 }
    68:             cout << space;
    69:             return 0;
    70: }
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