

```
1: #include "NBody.hpp"
2:
3:
4: int main(int argc, char* argv[]){
5:
6:     std::string store;//stores the input from the file
7:     std::string name;//name of planet
8:     int numberOfPlanets;
9:     float radius;//radius of window
10:
11:     //stores the number of planets
12:     std::cin >> store;
13:     std::stringstream(store) >> numberOfPlanets;
14:
15:     std::vector<Body> objects(numberOfPlanets);//vector of objects to store
all objects
16:
17:     //stores the radius of the window
18:     std::cin >> store;
19:     std::stringstream(store) >> radius;
20:
21:     //loop that stores all relevant data from the file
22:     for (int x = 0; x < numberOfPlanets; x++){
23:         std::cin >> objects[x];
24:     }
25:
26:     //take the data inside the
27:     //vector of bodies and print it on the screen using SFML
28:     sf::RenderWindow window(sf::VideoMode(1000, 800), "Ps3a Universe");
29:
30:     //display window
31:     while(window.isOpen()){
32:         sf::Event event;
33:         while(window.pollEvent(event)){
34:             if(event.type == sf::Event::Closed)
35:                 window.close();
36:         }
37:         window.clear(sf::Color::Black);
38:         //display all the planets
39:         for(int i = 0; i < numberOfPlanets; i++){
40:             window.draw(objects[i]);
41:         }
42:         window.display();
43:     }
44:
45:     return 0;
46: }
```