

```
1: #include <SFML/Audio.hpp>
2: #include <SFML/System.hpp>
3:
4: #include <vector>
5: #include <cstdlib>
6: #include <cmath>
7:
8: #include "RingBuffer.hpp"
9:
10: using namespace std;
11: using namespace sf;
12:
13: class GuitarString {
14: public:
15:     GuitarString(double frequency);
16:     GuitarString(vector<Int16> init);
17:
18:     void pluck();
19:
20:     void tic();
21:     Int16 sample();
22:     int time();
23:
24: private:
25:     RingBuffer rb;
26:     int count;
27:
28: };
```