

```
1: /* Copyright 2017 Sam Pickell */
2: #ifndef RINGBUFFER_HPP
3: #define RINGBUFFER_HPP
4:
5: #include <stdint.h>
6: #include <stdexcept>
7: #include <iostream>
8: #include <vector>
9:
10: class RingBuffer {
11: public:
12:     RingBuffer();
13:     explicit RingBuffer(int u_capacity);
14:     ~RingBuffer();
15:
16:     int size() { return my_size; }
17:     int get_capacity() { return capacity; }
18:     bool isEmpty();
19:     bool isFull();
20:     void enqueue(int16_t x);
21:     int16_t dequeue();
22:     int16_t peek();
23:
24: private:
25:     int my_size, capacity;
26:     std::vector<int16_t> data;
27: };
28: #endif
```