```java
1  package poo_unidade_11_ex05_blockingbuffer;
2
3  import java.util.concurrent.ArrayBlockingQueue;
4
5  /**
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7   */
   public class BlockingBuffer implements Buffer {
9      private ArrayBlockingQueue <Integer> buffer;

11     public BlockingBuffer() {
12         buffer = new ArrayBlockingQueue<Integer>(3);
       }

       @Override
       public void set(int value) {
           try{
               buffer.put(value); // Coloca valor no buffer circular.
               System.out.printf("%s%2d\t%s%d\n", "Produtor escreveu: ", value,
                       "Buffers ocupados: ", buffer.size());
           }
           catch(Exception e){
               e.printStackTrace();
           }
       }

       @Override
       public int get() {
           int readValue = 0;

           try{
               readValue = buffer.take(); // Remove valor do buffer circular.
               System.out.printf("%s%2d\t%s%d\n", "Consumidor leu:    ",
                       readValue, "Buffers ocupados: ", buffer.size());
           }
           catch(Exception e){
               e.printStackTrace();
           }

           return readValue;
       }
   }
```