1 **public** **class** SynchronizedBuffer

2 {

3 **int** sharedData;

4 **private** **boolean** writeable = **true**;

5 **private** **boolean** readable = **false**;

6

7 **public** SynchronizedBuffer()

8 {

9

10 }

11

12 **public** **synchronized** **void** setData(**int** dataItem)

13 {

14 t**r**y

15 {

16 **while**(writeable == **false**)

17 {

18 **wait**();

19 }

20 }

21 **catch**(InterruptedException e)

22 {

23 }

24

25 sharedData = dataItem;

26 writeable = **false**;

27 readable = **true**;

28 notifyAll();

29 }

30

31 **public** **synchronized** int getData()

32 {

33 **int** dataItem;

34 **try**

35 {

36 **while**(readable == **false**)

37 {

38 wait();

39 }

40 }

41 **catch**(InterruptedException e)

42 {

43 }

44

45 writeable = **true**;

46 readable = **false**;

47 dataItem = sharedData;

48 notifyAll();

49 **return** dataItem;

50 }

51 }

**Figure 14.19 The class SynchronizedBuffer.**