module BoundedBuffer

  op deposit(typeT), fetch(result typeT);

body

process Buffer {
  typeT buf[n];
  int front = 0, rear = 0, count = 0;
  while (true)
  in deposit(item) and count < n ->
    buf[rear] = item;
    rear = (rear+1) mod n; count = count+1;
  [] fetch(item) and count > 0 ->
    item = buf[front];
    front = (front+1) mod n; count = count-1;
  ni
}

end BoundedBuffer

Figure 8.5  Rendezvous implementation of a bounded buffer.

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