

Bounded-Buffer Problem

Producer:

```
1  while (true) {  
2      /* do nothing -- no free buffers */  
3      while (((in + 1) % BUFFER_SIZE) == out);  
4  
5      produce(buffer[in]);  
6  
7      in = (in + 1) % BUFFER_SIZE;  
8  }
```

Consumer:

```
1  while (true) {  
2      while (in == out); // do nothing  
3  
4      consume(buffer[out]);  
5  
6      out = (out + 1) % BUFFER_SIZE;  
7  }
```

