

# Race Conditions

Two producers

```
1  #define BUFFER_SIZE 100
2  typedef struct {
3      /* ... */
4  } item;
5  item buffer[BUFFER_SIZE];
6  int in = 0;
7  int out = 0;
```

Process A and B do the same thing:

```
1  while (true) {
2      while (((in + 1) % BUFFER_SIZE) == out);
3      buffer[in] = item;
4      in = (in + 1) % BUFFER_SIZE;
5  }
```