

CA\Users\mudir\OneDrive\Documents\OS18.cpp - [Executing] - Embarcadero Dev-C++ 6.3

File Edit Search View Project Execute Tools AStyle Window Help

TDM-GCC 9.2.0 64-bit Release

(globals)

Project Class

os11.cpp x OS12.cpp x OS13.cpp x OS14.cpp x OS15.cpp x OS16.cpp x OS17.cpp x OS18.cpp x

```
1 #include <stdio.h>
2 #include <windows.h>
3
4 #define BUFFER_SIZE 5
5
6 int buffer[BUFFER_SIZE];
7 int in = 0, out = 0;
8
9 HANDLE empty;
10 HANDLE full;
11 HANDLE mutex;
12
13 DWORD WINAPI producer(LPVOID arg) {
14     int item;
15     for (int i = 0; i < 10; i++) {
16         item = i + 1;
17
18         WaitForSingleObject(empty, INFINITE);
19         WaitForSingleObject(mutex, INFINITE);
20
21         buffer[in] = item;
22         printf("Producer produced: %d at position %d\n", item, in);
23         in = (in + 1) % BUFFER_SIZE;
24
25         ReleaseMutex(mutex);
26         ReleaseSemaphore(full, 1, NULL);
27         Sleep(1000);
28     }
29     return 0;
30 }
```

Compiler (6) Resources Compile Log Debug Find Results Console Close

Abort Compilation

Errors: 0  
Warnings: 0  
Output Filename: C:\Users\mudir\OneDrive\Documents\OS18.exe  
Output Size: 325.6357421875 KiB  
Compilation Time: 0.59s

Shorten compiler pat

Line: 26 Col: 45 Sel: 0 Lines: 70 Length: 1975 Insert Done parsing in 2.078 seconds

1 cm of rain Sunday

Search

ENG IN

23:01 30-09-2025

Producer produced: 1 at position 0  
Consumer consumed: 1 from position 0  
Producer produced: 2 at position 1  
Consumer consumed: 2 from position 1  
Producer produced: 3 at position 2  
Producer produced: 4 at position 3  
Consumer consumed: 3 from position 2  
Producer produced: 5 at position 4  
Producer produced: 6 at position 0  
Consumer consumed: 4 from position 3  
Producer produced: 7 at position 1  
Producer produced: 8 at position 2  
Consumer consumed: 5 from position 4  
Producer produced: 9 at position 3  
Producer produced: 10 at position 4  
Consumer consumed: 6 from position 0  
Consumer consumed: 7 from position 1  
Consumer consumed: 8 from position 2  
Consumer consumed: 9 from position 3  
Consumer consumed: 10 from position 4

-----  
Process exited after 20.2 seconds with return value 0  
Press any key to continue . . .