

Name: Rom Tola ID: e20220305

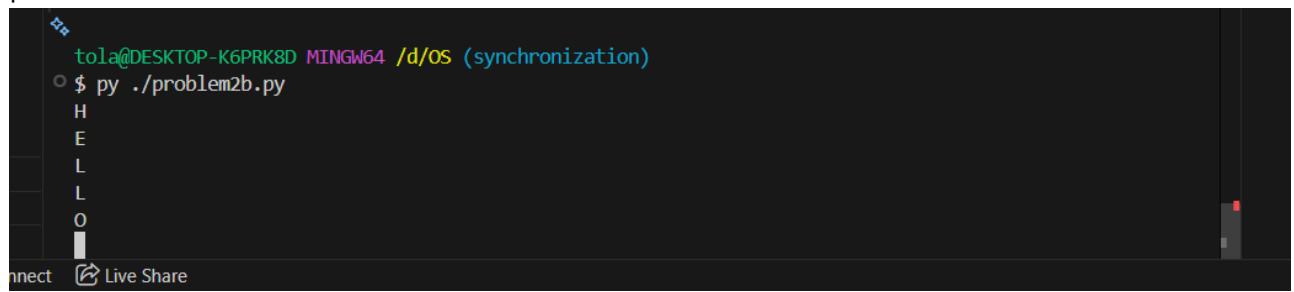
- problem1:

```
tola@DESKTOP-K6PRK8D MINGW64 /d/OS (synchronization)
$ py ./problem1.py
[Producer 0] placed pair 0 at slots 0 & 1
[Producer 1] placed pair 1 at slots 2 & 3
[Producer 2] placed pair 2 at slots 4 & 5
[Consumer] fetched pair from slots 0 & 1: (P1_from_producer0, P2_from_producer0)
[Producer 2] placed pair 3 at slots 6 & 7
[Consumer] fetched pair from slots 2 & 3: (P1_from_producer1, P2_from_producer1)
[Producer 2] placed pair 4 at slots 8 & 9
[Producer 0] placed pair 5 at slots 10 & 11
[Producer 1] placed pair 6 at slots 12 & 13
[Producer 2] placed pair 7 at slots 14 & 15
[Producer 1] placed pair 8 at slots 16 & 17
[Producer 2] placed pair 9 at slots 18 & 19
[Producer 0] placed pair 10 at slots 20 & 21
[Producer 2] placed pair 11 at slots 22 & 23
[Producer 1] placed pair 12 at slots 24 & 25
[Producer 0] placed pair 13 at slots 26 & 27
[Producer 2] placed pair 14 at slots 28 & 29
[Consumer] fetched pair from slots 4 & 5: (P1_from_producer2, P2_from_producer2)
[Producer 1] placed pair 15 at slots 30 & 31
[Consumer] fetched pair from slots 6 & 7: (P1_from_producer3, P2_from_producer3)
[Producer 0] placed pair 16 at slots 32 & 33
[Producer 1] placed pair 17 at slots 34 & 35
[Producer 1] placed pair 18 at slots 36 & 37
[Producer 2] placed pair 19 at slots 38 & 39
[Producer 0] placed pair 20 at slots 40 & 41
[Consumer] fetched pair from slots 8 & 9: (P1_from_producer4, P2_from_producer4)
[Producer 1] placed pair 21 at slots 42 & 43
[Producer 0] placed pair 22 at slots 44 & 45
[Producer 1] placed pair 23 at slots 46 & 47
[Producer 2] placed pair 24 at slots 48 & 49
[Producer 0] placed pair 25 at slots 50 & 51
[Consumer] fetched pair from slots 10 & 11: (P1_from_producer5, P2_from_producer5)
[Producer 1] placed pair 26 at slots 52 & 53
[Producer 0] placed pair 27 at slots 54 & 55
[Producer 2] placed pair 28 at slots 56 & 57
[Producer 1] placed pair 29 at slots 58 & 59
```

- problem2a:

```
tola@DESKTOP-K6PRK8D MINGW64 /d/os (synchronization)
❸ $ py ./problem2a.py
HILOOLLEHOOLEOHOEHLILLOELLHOOEOOHLOLOELOLHOOLLOELOHOELHOOLLLEOHLOELLHOELHOLEHLOELOOHLLELOLHOLELHL
EOHLOEHLLEOLHOELHELOHEOLOLHLOOEOLHLLLOOLLELLOHOLEOLOHELOLHOLLOLLOELHOEELLHLLLOOOLEOHOELHOLLEOLOLHLOEHL
OELOHOLELLOHLOEHOELOLHOLEOLOOOLHLLLOELOLHLOEHOELOLHOLLOEHEHOLEEHOEHLLOELOOEHLOEHEOLHLOOEELOHOOLEOOLHLLLOEHL
LLOLLELLHEOLLOLHOELOLHOLEOLOOHELOHLEOOLLLOHOEOLOLHLELHOOOELOHOEHEOLOLHLOELOHOLEOLOHELOLHOLEHEO
LHOELLOHLEOHELLOHOLEOLOHOELOLHOLEOLOOOLHLEOOLHEHLLLOEHELLOOHELOOHOELOOLOHOELOLHLOELHOLLOELOOHLLEOHE
HLOEOOOOLHLLHEOHLLEOOLLHOOOELHEOOLLHLOOELOHEHLLLOOELHLOEELLHOLOELOOLOHOLELHOOOOEOLLOHLEOLOH
OLELOOHLHEOHLLEOHLHLEOOLHELOHLOELOLHLOEHOELOLHOLEOOLOLHLOOEEHLOELOHOLLEOHOELOHLOEHLLEOOLHLOEOLH
LOLEOLHOOOLEOOLHEOHEHLLLOEOLHLOEOLOHEHEHOLEOLHLOEOLHLOEOLHLOOOLELOHLLHOOEHLLOOLOOLEOLHLOLEOLHLOELLH
OHLOOELOHLOEHOELOLLOHLOEHOELOLHOLEOLOHEException ignored while joining a thread in _thread._shutdown():
Traceback (most recent call last):
  File "C:\Python314\Lib\threading.py", line 1582, in _shutdown
    _thread_shutdown()
KeyboardInterrupt:
```

- problem2a:



A screenshot of a terminal window titled "MINGW64 /d/os (synchronization)". The command entered is "\$ py ./problem2b.py". The output consists of the letters H, E, L, L, O stacked vertically. The terminal interface includes a status bar at the bottom with "Connect" and "Live Share" buttons.

```
tola@DESKTOP-K6PRK8D MINGW64 /d/os (synchronization)
$ py ./problem2b.py
H
E
L
L
O
```

- [Link to source code in github](#)